MPI Studies on Intellectual Property and Competition Law 25

Hanns Ullrich Reto M. Hilty **Matthias Lamping** Josef Drexl Editors



TRIPS plus 20

From Trade Rules to Market Principles



Max Planck Institute for Innovation and Competition



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Volume 25

Edited by

Josef Drexl Reto M. Hilty Joseph Straus Hanns Ullrich • Reto M. Hilty • Matthias Lamping • Josef Drexl Editors

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Editors
Hanns Ullrich
Max Planck Institute for Innovation
and Competition
Munich
Germany

Matthias Lamping
Max Planck Institute for Innovation
and Competition
Munich
Germany

Reto M. Hilty
Max Planck Institute for Innovation
and Competition
Munich
Germany

Josef Drexl Max Planck Institute for Innovation and Competition Munich Germany

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Preface

On April 15, 1994, the "Agreement on the Trade-Related Aspects of Intellectual Property Rights" (TRIPS) has been signed in Marrakech as part of the "Agreement on the Establishment of the World Trade Organization" (WTO). Soon thereafter, on January 1, 2015, the WTO entered into operation. Since the Max Planck Institute for Innovation and Competition always took great academic interest in critically analyzing, first the drafting process, and then the freshly created TRIPS Agreement, we felt that after 20 years of existence of the Agreement, there were reasons enough to take a fresh look at it.

Within the framework, which the WTO sets for the economic and legal regulation of international trade relations, the TRIPS Agreement aims at comprehensively ensuring the international protection of intellectual property by obliging all WTO Members to provide for such adequate standards of protection as it defines in detail with respect to the substance and the enforcement of the rights flowing from the main categories of intellectual property. Over the last 20 years, the conditions have changed fundamentally, however, which had been assumed determining the operation of this international system of trade-related intellectual property rights. Due to economic globalization, markets have largely expanded beyond national borders, if not merged internationally. As a considerable number of once developing States have emerged as global and frequently enough as "big" players, the political weights have shifted geographically and the terms of international competition have undergone quite some modification. At the same time, progress of technologies, of transportation and of communication have had a deep impact on the choice of localization of manufacture and on the configuration of the chains of production as well as on the forms and the contents of the exchange of goods and services. Also, the exchange itself has accelerated. As a result, the need for the protection of

¹ F.-K. Beier & G. Schricker (1989), GATT or WIPO – New Ways in the International Protection of Intellectual Property; F.-K. Beier & G. Schricker (1996), From GATT to TRIPS – The Agreement on Trade-Related Aspects of Intellectual Property Rights.

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intellectual property has changed and, concomitantly, a need for "protection against protection" has arisen in instances, where the right to protection produces dysfunctional or other potentially harmful effects.

Moreover, developments in public international law, such as the increased awareness of the vulnerability of public international goods or the broader recognition of human rights have made that ever more frequently the reach of intellectual property protection is put into question. Tensions also have made themselves felt inside the WTO. Membership has increased from 76 to 160 States, and, partly due to that increase, the WTO has run into a deep institutional and structural crisis. The rules of so many bilateral and regional (free) trade agreements, which Members have concluded during and after the Uruguay Round, tend to supersede not only the general WTO trade regime of GATT and of GATS, but also the TRIPS system of intellectual property protection (so-called TRIPS plus clauses). At the same time, the TRIPS Agreement, whilst remaining as highly controversial as ever, has been developed further, in part by some smaller, express amendment, but mainly by State practice, WTO dispute settlement, and possibly also by a rich and intense public political (and academic!) discussion of its economic and legal terms.

This publication does not aim at retracing these changes and developments in any detail. Rather, it takes them as points of departure for examining whether the TRIPS Agreement should still be seen only as being part of an international trade regulation, which rests on reciprocity of trade concessions, or whether, instead, it needs to be understood as representing a generally accepted—or at least a generally acceptable—legal order of intellectual property, which Member States are supposed and able to transform into a functionally appropriate system of domestic intellectual property protection. The perspective, therefore, is not that of defining the terms of an outright revision of the TRIPS Agreement as such, which, politically speaking, is not to be expected. Rather, the perspective is that of an interpretative evolution, which makes the Agreement better meet the real needs of the economies concerned.

In that regard, the focus is, first, on establishing a better balance between the conflicting interests of the owners of intellectual property rights and of third parties, users or competitors (many of whom may possibly hold or come to hold such property rights as well). Second, there is a constant concern about a potential need for redefining and improving the terms of protection as a matter of enhancing its macroeconomic functionality. Third, it has become ever more important to ensure the compatibility, if not convergence of intellectual property protection with the protection of other private and public goods. Last, but not least, attention must be had of risks of undue indirect or extraterritorial effects of national systems of protection on other nations' systems and economies.

Given the natural limitation of the number of contributors and of their possible involvement in the common research project, it has not been possible to take up all relevant issues. Therefore, some of the more prominent and already broadly discussed problem areas had to be left unattended, such as the controversial link between the protection of intellectual property and economic development in general, or, more specifically, the relationship between intellectual property

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protection and access to medicines at prices, which are affordable under given economic conditions.

The contributions have been submitted to critical discussion at a workshop held in Munich on 14 and 15 April 2014, the "anniversary" of the TRIPS Agreement. We express our sincere thanks to all the invited external experts, who by their generous inputs helped us so much to refine our draft papers into the final versions, which we now present in this book.

Munich, Germany April 2015 Hanns Ullrich Reto M. Hilty Matthias Lamping Josef Drexl

List of Journals

A. J. Comp. L. The American Journal of Comparative Law

ABLJ American Business Law Journal
Admin. L. Rev. Administrative Law Review
AIPLA Qu. J. AIPLA Quarterly Journal

AJIL American Journal of International Law Akron Intell. Prop. J. Akron Intellectual Property Journal

Alb. L.J. Sci. & Tech. Albany Law Journal of Science and Technology

Am. Econ. Rev. The American Economic Review
Am. J.L. & Med. American Journal of Law & Medicine

Am. U. Int'l L. Rev. American University International Law Review

Amer. Econ. Rev. The American Economic Review

Antitrust L.J. Antitrust Law Journal

Australian J. Asian L. Australian Journal of Asian Law

Australian Yb. Int'l L. Australian Year Book of International Law

Australian Econ. Rev.
Australian Economic Review
Australian L.R.
Australian Law Reports
B.C. L. Rev.
Boston College Law Review
Boston University Law Review
Berkeley Tech. L.J.
Berkeley Technology Law Journal

BMM Bulletin Tijdschrift op het gebied van Merken- en

Modellenrecht

B.U. Int'l L.J. Boston University International Law Journal

Buff. L. Rev. Buffalo Law Review

BYIL British Yearbook of International Law

Cal. L. Rev. California Law Review

Cambridge Yb. Eur. Legal Cambridge Yearbook of European Legal Studies

Stud.

Can. Bus. L.J. Canadian Business Law Journal Can.-U.S. L.J. Canada-United States Law Journal

Cardozo A.E.L.J. Cardozo Arts & Entertainment Law Journal

Case W. Res. J. Int'l L. Case Western Reserve Journal of International Law

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Case W. Res. L. Rev. Case Western Reserve Law Review

Chi.-Kent L. Rev. Chicago Kent Law Review
CLP Current Legal Problems
CML Rev. Common Market Law Review

Colum. J. Envtl. L.
Colum. J. Eur. L.
Colum. J. Transnat'l L.
Colum. J.L. & Arts

Colum. J. Envtl. L.
Columbia Journal of European Law
Columbia Journal of Transnational Law
Columbia Journal of Law & the Arts

Colum. L. Rev. Columbia Law Review

Colum. Sci. & Tech. L. Rev. Columbia Science and Technology Law Review Colum.-VLA J.L. & Arts Columbia VLA Journal of Law & the Arts

Conn. L. Rev. Connecticut Law Review

Constit. Polit. Econ. Constitutional Political Economy

Cornell L. Rev. Cornell Law Review

Currents International Trade Law Journal

Duke J. Comp. & Int'l L. Duke Journal of Comparative & International Law

Duke L.J. Duke Law Journal

EIPR European Intellectual Property Review
EJIL European Journal of International Law

ELJ European Law Journal

Emory Int'l L. Rev. Emory International Law Review

EuR Europarecht

Euro, J. Human Genetics
Euro, Comp. J.

European Journal of Human Genetics
European Competition Journal

EuZW Europäische Zeitschrift für Wirtschaftsrecht

Fed. Circuit B.J. Federal Circuit Bar Journal

Fla. L. Rev. Florida Law Review

Fordham Int'l L.J. Fordham International Law Journal Fordham Intell. Prop. Media & Fordham Intellectual Property, Media &

& Ent. L.J. Entertainment Law Journal Fordham L. Rev. Fordham Law Review

Ga. St. U. L. Rev. Georgia State University Law Review

Geo. Int'l Envtl. L. Rev. Georgetown International Environmental Law

Review

Geo. J. Int'l L. Georgia Journal of International and Comparative

Law

Geo. L.J. Georgetown Law Journal

Geo. Wash. Int'l L. Rev.

GRUR

GRUR Int.

The George Washington International Law Review
Gewerblicher Rechtsschutz und Urheberrecht
Gewerblicher Rechtsschutz und Urheberrecht –

Internationaler Teil

Harv. J.L. & Tech. Harvard Journal of Law & Technology

Harv. L. Rev. Harvard Law Review

List of Journals xi

Hastings Bus. L.J. Hastings Business Law Journal Hastings Communications and Entertainment Law Hastings Comm. & Ent. L.J. Journal Hastings L.J. Hastings Law Journal Houston Journal of International Law Hous. J. Int'l L. Hous, L. Rev. Houston Law Review HRO Human Rights Quarterly **IDEA** IDEA: The Intellectual Property Law Review IIC International Review of Intellectual Property and Competition Law **ILR** International Law Research Ind. J. Global Legal Stud. Indiana Journal of Global Legal Studies Ind. J.L. Tech. The Indian Journal of Law and Technology Ind. L.J. Indiana Law Journal Indiana Law Review Ind. L. Rev. Int'l & Comp. L.Q. International and Comparative Law Quarterly Int'l J. Hum. Rts. International Journal of Human Rights (and Constitutional Studies) International Legal Material Int'l Leg. Mat. Int'l & Comp. L.Q. International and Comparative Law Quarterly Intellectual Property Quarterly IPO J. Bus. Entrepreneurship Journal of Business, Entrepreneurship & the Law J. Competition L. & Econ. Journal of Competition Law and Economics J. Crim. Law Criminol. Journal of Criminal Law and Criminology J. Econ. Hist. Journal of Economic History J. Econ. Persp. Journal of Economic Perspectives J. Hum. Rts. Journal of Human Rights J. Int'l Dispute Settlement Journal of International Dispute Settlement Journal of International Economic Law J. Int'l Econ. L. Journal of International Economics J. Int'l Econ. J. Int'l Media & Ent. L. Journal of International Media & Entertainment Law J. Int'l. Dispute Settlement Journal of International Dispute Settlement Journal of Intellectual Property Law & Practice J. Intell. Prop. L. & Practice J. Intell. Prop. L. Journal of Intellectual Property Law J.L. & Econ. Journal of Law & Economics J. Marshall Rev. Intell. John Marshall Review of Intellectual Property Law Prop. L. J. Polit. Econ. Journal of Political Economy J. Transnat'l L. & Pol'y Journal of Transnational Law and Policy Spring Journal of World Intellectual Property J. W. Intell. Prop. J.L. & Com. Journal of Law and Commerce J.L. & Econ. Journal of Law & Economics

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J.L. Tech. & Pol'y Journal of Law, Technology & Policy

J.W.T. Journal of World Trade

JCRED Journal of Civil Rights and Economic Development

JEL Journal of Economic Literature

JIPITEC Journal of Intellectual Property, Information

Technology, and Electronic Commerce Law

JIPR Journal of Intellectual Property Rights

JITE Journal of Institutional and Theoretical Economics

JLME Journal of Law, Medicine & Ethics JNPÖ Jahrbuch für Neue Politische Ökonomie

JuSJuristische SchulungJZJuristenzeitungKansas L. Rev.Kansas Law ReviewLaw & Lit.Law and Literature

Law & Contemp. Probs.

Law and Contemporary Problems

Law & Pol'y Int'l Bus.
Leg. Iss. Eur. Integr.
Legal Iss. Econ. Integr.
Loy. L.A. L. Rev.
Law and Policy in International Business
Legal Issues of European Integration
Legal Issues of Economic Integration
Loyola of Los Angeles Law Review

Marquette Intell. Prop. Marquette Intellectual Property Law Review

L. Rev.

MdP Mitteilungen der deutschen Patentanwälte Mich. J. Int'l L. Michigan Journal of International Law

Mich. L. Rev. Michigan Law Review
Mich. St. L. Rev. Michigan State Law Review

Mich. Telecomm. Tech. Michigan Telecommunications and Technology

L. Rev. Law Review

Minn. J.L. Sc. & Tech. Minnesota Journal of Law, Science & Technology

Minn. J. Int'l L. Minnesota Journal of International Law

Minn. L. Rev. Minnesota Law Review

MIT SMR MIT Sloan Management Review

MMR MultiMedia und Recht Mod. L. Rev. Modern Law Review

N.C.L. Rev. North Carolina Law Review
N.Y.L. Sch. L. Rev. New York Law School Law Review

N.Y.U. J. Legis. & Pub. New York University Journal of Legislation and

Pol'y Public Policy

Nat. Rev. Genet.

Neb. L. Rev.

Nature Reviews Genetics

Nebraska Law Review

New Eng. Econ. Rev. New England Economic Review

NJCM-Bull. Nederlands Juristen Comité voor de Mensenrechte

Bulletin

NJW Neue Juristische Wochenschrift Nord. Envtl. L.J. Nordic Environmental Law Journal List of Journals xiii

Nw. J. Int'l L. & Bus. Northwestern Journal of International Law &

Business

Nw. J. Tech. & Intell. Prop. Northwestern Journal of Technology and

Intellectual Property

NYU J. Int.'l L. Pol. New York University Journal of International Law

and Politics

Or. L. Rev. Oregon Law Review

Oxford Rev. Econ. Pol'y
Pac. Rim L. & Pol'y J.
Oxford Review of Economic Policy
Pacific Rim Law & Policy Journal

Prometheus Prometheus Critical Studies in Innovation Q.J. Aus. Econ. Quarterly Journal of Austrian Economics R.I.D.E. Revue Internationale de Droit Économique

RAND J. Econ. The RAND Journal of Economics Rev. Econ. Stat. Review of Economics and Statistics

ReWir Recklinghäuser Beiträge zu Recht und Wirtschaft

S. Cal. L. Rev. Southern California Law Review

Santa Clara Comp. & High Santa Clara Computer & High Technology Law

Tech. L.J. Journal

SMU L. Rev. SMU Law Review Stanford L. Rev. Stanford Law Review

Tex. Int'l L.J.

Texas International Law Journal

TMR The Trademark Reporter
Trade L. & Dev. Trade, Law and Development
Tul. Envtl. L.J. Tulane Environmental Law Review

Tul. L. Rev. Tulane Law Review

U. Chi. L. Rev. University of Chicago Law Review

U. Ottawa L. & Tech. J. University of Ottawa Law & Technology Journal

UC Davis L. Rev. UC Davis Law Review UC Irvine L. Rev. UC Irvine Law Review

UCLA J. Int'l L. & Foreign UCLA Journal of International Law and Foreign

Aff.

UNSW L. J. University of New South Wales Law Journal

Va. J. Int'l L. Virginia Journal of International Law Va. J.L. & Tech. Virginia Journal of Law and Technology

Affairs

Va. L. Rev. Virginia Law Review

Vand. J. Transnat'l L. Vanderbilt Journal of Transnational Law

Vand. L. Rev. Vanderbilt Law Review Vill. L. Rev. Villanova Law Review

W. New Eng. L. Rev. Western New England Law Review Wash. & Lee L. Rev. Washington and Lee Law Review

WIPO J. WIPO Journal

Wis. L. Rev. Wisconsin Law Review

World Comp. L. Rev. World Competition Law Review

World Econ. The World Economy

xiv List of Journals

World Trade Rev. World Trade Review
WuW Wirtschaft und Wettbewerb
Yale J. Int'l L. Yale Journal of International Law

Yale L.J. Yale Law Journal

ZWeR Zeitschrift für Wettbewerbsrecht

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Part I Revisiting the Policy Rationale of TRIPS

The Origins and Structure of the TRIPS Agreement

William Cornish and Kathleen Liddell

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Prof. Dr. William Cornish is Emeritus Herchel Smith Professor of Intellectual Property Law at the University of Cambridge and an External Academic Member of the Max Planck Institute for Innovation and Competition, Munich. Dr. Kathleen Liddell is a Senior Lecturer in the Faculty of Law, University of Cambridge, and Director of its Centre for Law, Medicine and Life Sciences, and Deputy Director of its Centre for Intellectual Property and Information Law.

W. Cornish (⋈) • K. Liddell

University of Cambridge, Cambridge, UK e-mail: wrc1000@cam.ac.uk; kml23@cam.ac.uk

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Abstract The essays in this volume focus upon the Trade-Related Intellectual Property Agreement, which is an important element in the constitution and practice of the World Trade Organisation (WTO). Known to all as the TRIPS Agreement, it reached its twentieth anniversary in operative effect on January 1, 2015. It is unlikely that the text of the TRIPS Agreement will be substantially amended by the Member states of the WTO for at least another decade or two. Our contributors therefore take its current terms as a continuing authority in international law for its immediate future. They do so, however, questioning how far the Agreement was adequate for its own time and how far it remains so in a world that has been changing so extraordinarily during the intervening 20 years and doubtless will continue to do so for the twenty to follow.

1 Introduction

The remit of this chapter is to consider the histories of free trade agreements and intellectual property rights up to the introduction of the revised GATT in 1995, while leaving it to other contributors to comment upon events that have provoked front-line debates in the 20 years that have followed. Some of these contributions discuss particular events, for example decisions by Dispute Settlement bodies and the amendments made in the Doha Round. Others seek to explore possibilities for

¹ For legal commentaries on the interpretation of TRIPS, see A. Taubman, H. Wager & J. Watal (2012), A Handbook on the WTO TRIPS Agreement; J. Malbon, C. Lawson & M. Davison (2014), The WTO Agreement on Trade-Related Aspects of Intellectual Property Rights: A Commentary; C. Correa (2010), Research Handbook on Intellectual Property Law and the WTO; C. Correa (2007), Trade Related Aspects of Intellectual Property Rights; D. Gervais (2012), The TRIPS Agreement: Drafting History and Analysis; T. Stoll, J. Busche & K. Arend (2009), Trade-Related Aspects of Intellectual Property Rights. For some imaginative conceptualisation, see esp. G.B. Dinwoodie & R.C. Dreyfuss (2012), A Neofederalist Vision of TRIPS: The Resilience of the International Intellectual Property Regime; which should be read with their essay supporting a central role for WIPO in international development of intellectual property policy.

² See Lewinski (this volume).

the future legal interpretation of TRIPS, continuing the extensive literature on "flexibilities" that arise from the drafting of TRIPS.³ The recurrent question is the extent to which TRIPS and associated international law principles leave responsibilities and freedoms to be set by domestic or regional legislation, administration, judicial precedent and learned commentary. Some chapters consider the explicit and implicit flexibilities within the international framework in so far as TRIPS sits alongside the revised General Agreement on Tariffs and Trade (GATT) and other bilateral and multilateral agreements containing specific terms relating to intellectual property, such as the North American Free Trade Agreement of 1994 between the United States, Canada and Mexico, which have grown so significantly in number.⁴ Other chapters consider external sources of law and practice, and the extent to which they deserve recognition in settling how far TRIPS provisions are cast in concrete and how far in more malleable terms, for example, fundamental human rights, the preservation of biodiversity, environmental control and competition law.⁵

These and other arguments surrounding TRIPS reflect the fact (now largely lost in history) that intellectual property protection is not a natural coordinate within a multilateral agreement on international trade. This is one of the central reasons why TRIPS has proven such a significant, controversial and awkward legal instrument in its 20-year life. It is one of the issues we seek to draw out in this chapter.

Intellectual property rights (IPRs) are constructed for specific, limited objectives to encourage those who trade in a nation state to exploit ideas and indications of source without a competitor making unauthorised use of the protected subjectmatter, be it a technical invention or trade secret, a literary or artistic work, a trade mark for goods or services or some other category capable of similar legal protection. Holders of IPRs acquire the power to exclude others in a manner which has come to be characterised as private property, an assignation which implies a good many things. 6 It is the right holder who determines how his right will be utilised—in order to protect his own trade from infringers or through assigning or licensing the right by itself or on contractual terms that often enough set out a complex balance of interests between the parties involved. To achieve their objective, the rights must normally provide their holder with a stable commitment: they are not open during their term to cancellation or limitation by the state that grants them, save in exceptional circumstances. As with other rights of property (in land, commodities or assets) the holders may enforce IPRs against infringers who refuse to negotiate permission to act within the scope of the right. This is a realm of hard national law. Accordingly the owners' first recourse in most legal systems is to proceed by civil action brought privately by them. In consequence the legal attributes of intellectual property tend towards conformity over substantial periods of time. The main risks

³ For a selection of this extensive literature, see below at fn. 37.

⁴ See Drexl (this volume).

⁵ See Beiter et al. (this volume).

⁶ As acknowledged in the Preamble to TRIPS, Recital 3.

that owners face arise from the conditions of the markets to which their IP is relevant. An IPR may confer an exclusive legal right; but its economic value will partly be set by the prospects of continuing demand for products or services that fall either inside or outside the scope of the particular right.

In contrast, free trade agreements (FTAs) are typically consensual commitments between states, on a bilateral, plurilateral or multilateral basis, over the limits that those states must place on restrictions to trade in products or services between their own and other territories. Their conception was thus of the soft law kind which typified international obligations between states before the twentieth century. The content of FTAs emerges through a participant state first considering the treatment that its exporting industries desire by securing the removal or the lowering of customs barriers and other inhibitions imposed by the country to which they are to be sent; and also the needs of its domestic industries for protection against the inflow of competitive products and services from other participant state or states. Out of this preliminary process of consultation are generated policies in the collaborating states relating to trade between them which will reflect the degree of importance that countries attach to their particular industries. Public servants, under the direction of their politicians, will set about striking deals that are acceptable for the time being, but on the basis that each country may in future seek to alter the terms of its earlier agreement. However, as we shall see, TRIPS has put somewhat more by way of legal backbone into the "hard" regulatory obligations that FTAs impose in respect of IPRs.

In order to put these developments into their historical context as well as outlining the legal framework that is their outcome, it is best to deal with the emergence and growth of free trade agreements and intellectual property separately. This we do in Sects. 3 and 4 respectively, even though it calls for some doubling back in historical description. This enables us to treat the first perceptions of some significant amalgamation between the two and then describe the melting pot of major re-negotiation of the original GATT, which started with the Uruguay Round in 1986 (Sect. 5). With the origins of TRIPS summarised, we then move on to the actual content of the TRIPS Agreement (Sects. 6–9).

2 Political Economy and Free Trade

From the late Middle Ages onwards monarchs and their advisers had begun to seek the advantages of international trade, building upon an instinct to hoard—to accumulate their reserves of precious metals, currency, cultivated farmland, technical secrets, staple materials, profits of trade from colonies and so on—which would eventually be labelled 'Mercantilism'. These policies would be challenged in the later eighteenth century by the French Physiocrats and by Adam Smith and his

great follower, David Ricardo, who did much to make the advantages of free or liberalised trade between states a basic tenet of "classical" political economy.⁷

Inter-state trade instruments were largely the outcome of diplomatic negotiation, the studied politeness of which sometimes erupted in ash clouds of political antagonism. Protection of agricultural prices, for instance, would appeal to domestic landowners, but industrialists at home would claim that in consequence they must pay their labour force more than if imports of food ingredients were free of duties. As industrialising economies came to depend increasingly on their colonial and foreign trade, their politics tended to divide over conservative preferences for national protection at home and liberal preferences for free trade abroad. Once a state established a trade ministry, appointed a trade representative or set up offices to oversee trans-national trade in particular fields, that state was likely to be involved in bilateral discussions or, less frequently, in moves to establish plurilateral trade agreements as a means of balancing these preferences.⁸

Trade negotiations were inevitably pragmatic. Each country's public servants, having consulted its industries, would set about securing advantages for its own exporters by ensuring that they would have only to meet comparatively low tariffs, or even none at all, in countries to which they sought to export. Reciprocally, the exporting country would itself undertake not to impose tariffs above an agreed level for products being put onto its own markets from the other state or states. A government, whatever its political colour, had also to consider the needs of its own domestic economy. How satisfactorily could these be met by its own producers? Where would those producers find their raw materials and their own labour force—skilled, semi-skilled, or unskilled—needed to turn out finished commodities? How much more than the costs of bare subsistence would these workers have to earn in order to keep up a sufficient supply of products to a particular market?

Famously, in 1860, Richard Cobden, a leading voice of the Manchester School of political economy, persuaded the Emperor Napoleon III and his chief adviser, Chevalier, to reduce duties imposed on imports of British coal and coke to France in return for the removal of British duties on French wine. He argued that the two trades would then expand more rapidly than if high tariffs were maintained. Within a few years the trade in each direction grew as Cobden had predicted, though the Emperor remarked ruefully on its hardships for the French coal industry and its workers. The trend of thought would be sustained by the successful negotiation of further free trade

⁷ For guidance through the evolving theories of free trade advantages, absolute (Smith) or comparative (Ricardo), see M.J. Trebilcock, R. Howse & A. Eliason (2013), Regulation of International Trade, Ch. 1.

⁸ For recent use of the evidence over time of adopting free trade underpinnings in support of industrialising economies, see H. Chang (2002), Kicking Away the Ladder: Development Strategy in Historical Perspective.

⁹ A.L. Dunham (1930), The Anglo-French Treaty of Commerce of 1860 and the Progress of the Industrial Revolution in France after Napoleon.

agreements, most of them bilateral or to some degree plurilateral.¹⁰ There would be decades to come in which economic depression would persist even in states advancing towards complex urban conditions. Notably this was so towards the end of the nineteenth century and then in the short-enough peace between the World Wars, when governments turned back to supporting their own industries by protecting them with duties against competing products being imported from abroad.

3 Technical Innovation and Economic Growth

3.1 Incentives to Innovate

Alongside the belief in the rewards of free trade between states ran parallel theories that came to be treated as taproots of capitalist enterprise. Economists as different as Maynard Keynes and Milton Friedman associated economic growth to a large degree with a government's control over its money supply. Others, however, such as Joseph Schumpeter, stressed the emergence of a spirit of entrepreneurial drive as crucial to achieving those major technical innovations that would count as creative destructions of the settled orders of economic behaviour. These were the sources of industrial and commercial "revolutions", which increased the prospects for globalising trade during the period before World War I when competitive colonisation by powerful European states was at its height. ¹¹

Here was a crossroads between opening international trade to competition and providing incentives for industrial change by bolstering innovation. National governments that were promoting the scramble for technology and its productive application began to look at policies that would justify an acceptable flow of traffic between them. Public programmes enhanced the place of education and research and encouraged private individuals and enterprises to do likewise through their own business instincts or public benefactions and the like. Equally governments sought to foster the development of infrastructures that would improve the chances of businesses in their hunt for profitable returns from their business ventures. And for a host of motives, governments would attempt to enhance the productive capacities of less developed countries abroad through, for instance, aid programmes. As industrialising countries spread their wings in the nineteenth century, capital providers, being in the main private risk-takers, began to look for protected positions in the markets that they sought to exploit.

From early on governments in these states were attracted by ideas for intellectual property rights, concentrating their attention for the most part on their domestic scene. Part of their interest was undoubtedly that their role would primarily be

¹⁰ See H. Chang (2002), Kicking Away the Ladder: Development Strategy in Historical Perspective.

¹¹ See esp., J.A. Schumpeter (1955), History of Economic Analysis.

confined to maintaining a formal granting procedure; and to providing a court system that would handle enforcement of the rights against infringers. Government did not have to take the lead in the recurrent negotiations with other states that was the crucial element in free trade agreements.

3.2 Exclusive Rights of Exploitation Within Competitive Markets

Just when international trade agreements were spreading in the wake of industrialisation, so were systems of IPRs burgeoning in much the same countries. Initial types included patents for inventions, copyright in literary and artistic works, and protection for trade-marks, trade-names and 'get-up' used to indicate the trade source of products and services. 12 Each type was concerned with the ability to put knowledge to exploitative use, so IPRs were accordingly about factual information that had been developed into intelligent knowledge. Defining the rights was inherently difficult, since knowledge is shareable rather than separable; and these rights aimed to constrict what people other than IPR holders could do with it for commercial purposes. IPRs set boundaries to the general preference for freedom of competitive trading in a market, whether the market was purely local or one that extended beyond the reaches of a national state. They have therefore to be sustained by sufficient arguments in favour of their introduction. This is why one finds detailed laws relating to each IPR in developed countries. However much this throws up repeated disputes about the justifications for IPRs from an economic, legal, political, scientific or philosophical perspective, it is a necessary and important exercise that seeks to balance competing interests and resolve policy tensions in the face of considerable theoretical and empirical uncertainty. Understanding the source and importance of this complexity is one key to appreciating what TRIPS has added to inchoate notions of IPRs, their pitfalls and their dangers.

State legislation at the national level would provide the core of this movement but it would also be given shape and purpose through the decisions of courts, the management of patent and trade mark offices by public servants, the growth of professions primarily concerned with presenting applications for protection to these offices, and the establishment of private collecting societies (for example to collect royalties on performances of music in concerts, theatres, and then film showings and broadcasts). In some jurisdictions, enforcement powers were conferred on police, customs authorities and other public or private investigators. From one perspective

¹² For other, more specific forms of IPRs, see below. For further detail, W. Cornish, D. Llewelyn & T. Aplin (2013), Intellectual Property: Patents, Copyright, Trade Marks & Allied Rights.

these investigators were engaged in consumer protection; but unfair trading could equally injure a competitor that held or ought to hold IPRs. ¹³ The crucial conception of each form of IPR was that right holders would gain what reward they could, not from any direct funding by the state but by their ability to trade on the basis that they had obtained exclusive use of certain types or embodiments of knowledge.

Many of the "intellectual" novelties that received IPR protection had little chance of generating truly striking levels of profit-making, since relatively few of the rights removed all competition between products or services available in a market. But there would be particular intellectual contributions that would displace all real alternatives by being so much fitter for their purpose. It was then that IP right holders gained real economic power to set prices and other advantages at levels most likely to maximise gains for themselves. The very possibility stimulated the gambling instincts of venture capitalists as well as manufacturing and distributive businesses.

3.3 The Degree of Exclusive Protection

This then was the basic legal model for the various types of protection that IPRs gave against direct competition and it would lead eventually to them being classed together under the banner headline, Intellectual Property.¹⁴

In a broad sense the rules which define the scope of each type of IPR are more elaborate when the right is capable of preventing unlicensed enterprises from producing and marketing a competing product or service at all (regardless of whether copying is involved). For example patents for inventions typically confer a right to any version of the invention to which the patentees have properly laid claim; and they will be entitled to do so when, at the priority date for their patents, they are the first to apply for protection. In modern patent systems, given the strength of such a patent right against independent inventors (not merely copyists), there has to be an application describing the invention so that there can be examinations by qualified personnel at a national or regional patent office before and in some systems immediately after the patent is granted. The procedures and requirements thus established seek to fulfil the basic purposes of the system; first that they provide incentives for research and development that may lead to commercial exploitation and which otherwise might be deterred by the costs involved; and secondly, if successful, they may advance a flow of information from which an industry as a whole can benefit.

¹³ See A. Ohly (2015), TRIPS and Consumer Protection, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 681 (this volume).

¹⁴ The wide use of the term became standard once the UN brought together the supervision of the major international IP Conventions under its World Intellectual Property Organisation (to English speakers, WIPO, to the French, OMPI; sited in Geneva). Thus it became accepted as a type of private property right, bringing together forms of IP previously labelled 'industrial property' and 'copyright'. See further below, Sects. 4.2 and 4.3.

How efficient the system is in inducing these results is inevitably a matter of controversy, not least because it has to fit industries of a great many types.

Trade marks by contrast exist primarily to indicate the enterprise that has made or marketed its own products. Competitors can put out their own products without using a mark or any other identifying feature that will confuse the public about its trade origin. Difficulties may of course set in. This is likely when public familiarity with an established trade mark leads to the mark being adopted by an outsider as a supposed extension of the range of the first business or as a description of the product whatever source it comes from. Patents last only for a short period (which TRIPS has today standardised as at least 20 years from the filing date of the patent application.) Trade marks and similar indicators last indefinitely so long as their holder continues to use them. Patents require an application to a patent office. Trade marks are protected through a registration system or (in many countries) through court procedures based on a claimant's reputation from use of a mark in actual trade.

Between the poles of patents and trademarks lies the copyright of authors in their writings, compositions and artistic works. Its scope is limited by a general principle that confines it to copying of the expression of ideas, rather than merely the ideas themselves. Typically copyright does not need any preliminary step of deposit or registration with a public authority, yet it lasts for the authors' life plus at least 50 years from his death. These various characteristics have, until recently, been moulded at the levels of national law-making. With the emergence of economic communities of unfederated states, such as what is now the European Union, there have been considerable and complex movements to settle the terms of IPRs by comparing the previously separate systems operating in the member States. The resulting 'approximation' of rules is then intended to operate both for the national granting systems in EU states and for an equivalent EU right which has effect throughout the whole Union territory. Where registration or grant is a necessary preliminary, the result is a competition between two authorities for the business and many practical questions arise in consequence.

We make these points summarily without attempting to sketch in all the elements defining even the core forms of IPR. We do so to suggest that the generation of substantive law of entitlement to IPRs and of the law that settles the scope of infringing activities must inevitably confront issues of basic principle as well as detailed questions of practical procedure. Many of these rules play major roles in confining IPRs to the limited circumstances that justify making exceptions to the general preference for freedom of competition in states that benefit very substantially from capitalistic enterprise.

¹⁵ See below at Sect. 7.6.

¹⁶ See below at Sect. 7.5.

4 National States and IPRs: "Traditional" International Conventions

4.1 Territorial Scope of IPRs

Free trade was most often justified politically and economically in terms of the national policies of states. As qualifications on that freedom, IPRs were established by individual states for their geographical territory. The holders of IPRs could claim against infringers acting in the country for which the rights were granted by public authority or came into effect without formalities. Thus, the unauthorised user of a patented invention in France had to be sued by the owner of the French patent for that invention; the unauthorised publisher of a book in India needed to be pursued by the owner of the Indian copyright. ¹⁷

Working out the impact of IPRs on trade between states during the latter nineteenth century introduced considerations over and above those that were relevant to their impact in the home territory of the inventor, author, designer or brander. Should a country require that the applicant for a patent or registered trade mark be a national or resident of its territory? The answer tended to be no, for one thing because a less-developed country might consider having such systems only if it could attract technology from more advanced states whose industrialists would need to be entitled to local patents and other IPRs for their own protection. But should foreign applicants be entitled to hold IPRs for a particular country if they did not themselves make use of their exclusive knowledge there and so were not bolstering local industry? The concept of a local working requirement attracted some countries, but tended to prove too complex to be generally popular, whether imposed as a straightforward obligation on the right holder or made the basis for a compulsory licence by the state concerned.

Arguments concerning the detailed application of the law at this level were likely to be heavily influenced by those with legal and administrative experience of technology licensing processes. Many would have authority in their state to act as patent or trade mark attorneys, others would have business skills in their particular fields. In each generation and country, such people tended to advocate legal developments or constraints on the scope of IP systems that chimed with the

¹⁷ Much of the effectiveness of IPRs in practice would depend on the rights being licensed by the right holder. In many legal systems those who took exclusive licences would then acquire rights to pursue infringers of the right themselves, rather than having to oblige the right holder to do so. A right holder might license a single manufacturer or distributor for different countries, in the hope thereby of raising barriers against each licensee directly or indirectly selling on into countries where the authorised licensee was charging higher prices or providing other advantages. To achieve this effect, the IPR in the country of import had to apply a concept of 'first sale' or 'exhaustion of rights' only to sales within that country, not internationally. Whether, and in what circumstances, the scope of an IPR could be used to prevent the practice of parallel importation of 'legitimate' goods was unquestionably 'trade-related'. But the issue would eventually be placed outside the embrace of TRIPS (see Art. 5) simply because it was unassuageably contentious.

interests and assumptions of their professional practices. Politicians and public servants without the relevant specialist knowledge tended to find the whole subject too recondite to warrant their attention. So by the 1870s there emerged a ground-swell of opinion, led by right holders and the professionals who guided them, towards establishing international links between the countries with industrial and commercial growth spreading beyond their home markets. Separate international Conventions would bring into existence Unions of participating states in the 1880s which would set some groundwork for the scope of IPRs and smooth their administration across countries, so that claimants could obtain rights in an intellectual 'product' in each of the countries where they were likely to have an exploitative value.

4.2 The Paris Convention for the Protection of Industrial Property

The Paris Convention of 1883 and its revisions related to "industrial property" (patents, industrial designs, trademarks, etc). These rights mainly arose by formal grant from each state to which application had been made. By this period, it was mostly accepted that IPRs should be open to foreigners as well as nationals of the state in question. What the Paris Convention provided was an arrangement, particularly important in patent systems, allowing applicants to file in one state and then for an ensuing period of months to retain the priority date of the first application so as to effect further applications for the same invention in other states. ¹⁸ If this were not so, publication of the first application might render later applications in other countries no longer "novel", and thus unpatentable at least in those other countries.

The Paris Union also adopted the principle of national treatment between its member states. This effectively prevented nationals of a Union state from claiming that the courts of a second Union state should apply their "home" IPR; instead right holders would be guaranteed all the rights that the second state accorded to its nationals under its own law. As the first of its kind, the Paris Convention was largely confined to international issues concerning the *acquisition* of national IPRs for the same subject-matter and so it would mostly remain. While it required industrial designs to be protected in its Contracting states, it did not characterise the subject-matter that could count for this purpose, nor did it attempt to define the relationship

¹⁸ Similar priority arrangements were introduced for the registration of trade marks and registered designs: see The Paris Convention for the Protection of Industrial Property (Stockholm Revision 1967–68) Art. 4. For the evolution of the Convention, L.J. Duncan (1997), From Privileges to the Paris Convention, Chs. 5–7; W. Cornish et al. (2010), Oxford History of the Laws of England, pp. 956–963; S. Ricketson (2015), Commentary on the Paris Convention for the Protection of Industrial Property.

of industrial designs to other forms of IP in a country's armoury, such as artistic copyright or technical design registrations. ¹⁹ While by 1927 the Paris Union states were prepared to require national laws to protect a competitor against unfair competition, it never required a Contracting State to introduce a patent system for inventions or a registration system for trademarks, confining itself to international matters that follow from a state having chosen to create such rights. Accordingly, by comparison with TRIPS, the Paris Convention was in the main a facilitative regime for acquiring bundles of national industrial property rights, rather than a source of substantive IPR rules. This allowed individual states to address the controversies in IP policy with an eye to their own economic situations and beliefs.

4.3 The Berne Convention for the Protection of Literary and Artistic Works

The Berne Convention of 1886 concerned copyright protection of "literary and artistic works", once they were created by an author.²⁰ It would become a condition of Convention membership that a state would not require formal registration of the protected material as necessary to qualify for copyright protection.

Electronic methods of providing access to these works and similar material advanced from the late nineteenth century onwards with the development of sound recording, film, broadcasting and the current marvels of digital technology. Berne began to increase the substantive requirements that must appear in a Union state's law for the benefit of nationals of the Union states. Much of this concerned the scope of what constituted infringement, often as a response to new copying techniques.

States with major publishing, recording and film industries also began to accord "related" or "neighbouring" rights to copyright in the works of authors. Consequently, the 1961 Rome Convention gave international recognition to a number of such rights including rights for the protection of performers, producers of phonograms (i.e., audio recordings) and broadcasting organisations. ²¹ As a group these were rights protecting those undertaking key roles in the "presentational media" either as interpreters or investors.

¹⁹ See The Paris Convention, Art. 5.

²⁰ For the evolution and later development of the Berne Convention, see S. Ricketson & J. Ginsburg (2006), International Copyright and Neighbouring Rights: The Berne Convention and Beyond, Vol. 1, Chs. 2, 3; W. Cornish et al. (2010), Oxford History of the Laws of England, Vol. 13, pp. 908–918.

²¹ For the evolution of the Rome Convention, see S. Stewart (1989), International Copyright and Neighbouring Rights, Chs. 7, 8.

Together the Paris, Berne and Rome Conventions have headed the "traditional" international conventions relating to intellectual property.²²

4.4 Further Developments of the Paris and Berne Conventions

From the 1890s, the Paris and Berne Conventions would be revised or added to, typically every couple of decades. With some regularity in this period, a further splay of international agreements built up, covering less wide-ranging forms of intellectual property and their administration.

In 1967 the United Nations established the World Intellectual Property Organisation (WIPO), which brought together the administration of the Paris, Berne and Rome Unions. Around the same time, developing countries, which rarely saw their own or neighbouring nationals gaining IPRs that were worth a great deal, were beginning to seek concessions to meet their own conditions. Not surprisingly, revision conferences and WIPO's procedures and projects became increasingly contentious, particularly along the "North–south" divide. Berne was revised for developing countries so as to allow translation of texts into local languages, but only after two attempts (at Stockholm in 1967, and Paris in 1971). As to the Paris Convention, revision talks collapsed at Nairobi in 1982 over demands that developing country governments be permitted to grant compulsory patent licences for manufacturing or importing into their territory. 24

5 Recognition of IPRs as Part of Interstate Trade Relations

5.1 American Insistence on International Respect for IPRs

At this point we must return to the subject of international FTAs in order to highlight the emergence of campaigns to oblige FTA states to offer global support for IP systems. As early as the 1870s it had become by no means unusual to incorporate into FTAs of the day a general clause requiring trade in IP-protected

²² A fourth international agreement, the Treaty on Intellectual Property in Integrated Circuits (Washington, 1988) proved to be unattractive, since its two main beneficiaries, the US and Japan, refused to accept a provision confining the duration of the right to eight years. This impasse would be overcome by TRIPS Arts. 35–38, which required WTO Members to accept the Treaty, but substituted a term of at least ten years for the right to circuit layout designs.

²³ During the GATT Uruguay Round, WIPO achieved the laborious task of persuading both the US and then the Chinese People's Republic to join the Berne Convention.

²⁴ At that period, a number of Latin American countries began experimenting with legal measures that curbed the effectiveness of IPRs in the eyes of the leading industrial nations.

commodities to be respected in the course of international business. At most these declarations would inform subsequent discussions between a disgruntled government and one that it accused of failing to secure respect for IPRs, as required by the FTA between them. Sovereign states did not bind themselves to any higher scheme of obligation.²⁵

In the disruptive conditions that followed the peace of 1918, trade agreements continued to be forged or revamped, some of them bearing significantly on the future of what had, or would become, independent nations in Africa, Latin America and Asia. The victors of World War I had soon enough to observe the consequences of the punitive reprisals which they imposed upon the vanquished. That reluctant intervener in the War, the government of the United States, had to learn the dangers for its rapidly growing economy of the devastating collapse into the Great Depression of 1929.

One early measure in America's process of recovery was its highly protective Tariff Act of 1930.²⁶ In it was to be found a provision (s. 337), giving rights against the importation of goods into the US that constituted infringement of its IP laws. While this respected the general principle of territoriality, at the same time it presaged arguments about whether acts of importation should be subject to administrative procedures which were not relevant to domestic products. By 1974, s. 301 of the Trade and Tariff Act, took the further step of allowing the newly established International Trade Commission (ITC) of the US to adopt "trade" sanctions, such as tariffs and the withdrawal of subsidies and other benefits, against a country when it violates an FTA with the US or adopts unreasonable trade practices, that would unjustifiably restrict US commerce. The President's role in these issues was retained by formally establishing the office of Special Trade Representative (USTR).²⁷ In the 1980s, the disparity in treatment of allegedly infringing imports would lead to a finding by a GATT Dispute Settlement Panel that various aspects of the ITC procedure were contrary to the most favoured nation requirement of the GATT. The US in consequence introduced modifications to meet the central objections of the Panel's Report.²⁸

²⁵ See S. von Lewinski (2015), The WTO/TRIPS Dispute Settlement Mechanism: Experiences and Perspectives, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 603 (this volume); also D. Gervais (2012), The TRIPS Agreement: Drafting History and Analysis, pp. 286–292.

²⁶ Also known as the Smoot–Hawley Tariff Act, the Act raised US duties on over 20,000 imported goods to record levels.

²⁷ A specialist representative for trade negotiations had first been appointed by President Kennedy in 1962 pursuant to the Trade Expansion Act of that year. The position, and its associated Office, were significantly restructured by Congress in 1974 and 1979 to increase its visibility and accountability: F. Boadu & J. Shen (1997), An Empirical Analysis of the Growth and Autonomy of the Office of the United States Trade Representative, 6 Currents 1997, 3–5.

²⁸ For a detailed analysis of the GATT (1947) decisions and the consequences, see H. Grosse Ruse-Khan (2015), IP and Trade in a Post-TRIPS Environment, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 163 (this volume).

Increasingly, attention in the s. 301 scheme has focussed on intellectual property laws, policies and practices in other countries that did not meet FTA obligations or US views of reasonable IP protection. This forged a critical link between trade laws and intellectual property. Significantly it was a link very much tied to the interests of US domestic production and assumptions about the importance and needs of its knowledge industries.

Soon after the introduction of s. 301, came the setting-up of an Advisory Committee for Trade and Negotiations (the ACTN²⁹), through which the views of US corporations engaging in business covered by cross-border trade agreements could be expressed to their national government. Nothing could more clearly mark the country's determination to set the expectations as well as the rules of international trade in terms that would help satisfy great swathes of American private enterprise. And so would emerge an era of "aggressive unilateralism". For the purposes of this book, this era was particularly notable for the insertion of rules offering heightened protection for IPRs in FTAs between the US and other individual countries. Such protection went beyond the minima required by TRIPS, and was keenly sought by the US.

In the Omnibus Trade and Competitiveness Act of 1988,³¹ the legislative framework of 1930 and 1974 was supplemented by "blame and shame" obligations imposed on the USTR to report annually on trade violations by other countries individually when the breaches affected the US.³² These 1988 provisions extended the National Trade Estimate reporting requirement³³ (under which the USTR annually identifies and tries to quantify foreign trade barriers). They were designed, at the behest of US industry and Congress, to force the USTR to identify foreign countries that warranted priority treatment under the s. 301 framework. Several of these provisions focussed on IPRs and on identifying foreign countries that deny adequate and effective protection for IPRs established under international agreements, or that deny fair market access for persons relying on IPRs. Section 310 came to be known as Super 301 (it focussed on countries where s. 301 action posed the greatest trade expansion opportunities), and the requirement for an annual USTR report on foreign protection of IPRs came to be known as "special 301 reporting". In part, the hope was that the USTR would have less discretion about whether or not to take retaliatory measures against any country that was

²⁹ In 1988 'Policy' was inserted in the title after 'Trade'.

³⁰ S. Sell (2002), Private Power, Public Law: The Globalization of Intellectual Property Rights.

³¹ H.R. 4848. As US industries sought to tighten the effectiveness of their country's own IP laws, an intermediate stage was a set of amendments to s. 301 of the 1974 Law introduced by the Trade and Tariff Act of 1984: S. Sell (2002), Private Power, Public Law: The Globalization of Intellectual Property Rights, pp. 81–91.

 $^{^{32}}$ See in particular s. 182 and s. 310 of the Trade Act of 1974, as amended by the Omnibus Trade and Competitiveness Act of 1988.

³³ S. 181 of the Trade Act of 1974.

dragging its feet on obligations in its trade agreement with the US—in particular over IPRs.³⁴

When the WTO came into operation 7 years later, there were suggestions that the US might abandon its denunciatory approach to offending states on the "Special" list, but this proved to be a diplomatic sleight of hand. The US modified its approach—and has committed to securing WTO authorisation before imposing retaliatory trade sanctions—but the Special 301 reporting would continue to be applied to laggard countries, whether or not they were WTO Members during the period for which the USTR review was undertaken. This puts considerable policy and trade pressure on these countries, whilst strategically stopping short of unilateral trade sanctions that more clearly transgress WTO dispute settlement rules. In this use of bi- and pluri-lateral FTAs to enhance the protective effects of IPRs there may accordingly be a conflict over the certainty of norms: where TRIPS lays down a requirement (mostly as a minimum) and a bilateral trade agreement is more demanding, which is to be regarded as predominant?

Recently the current multi-pronged approach of the US has been taken up in particular by the European Union, which is increasingly negotiating bilateral trade agreements with non-EU states.³⁸ As already noted, these may well include pro-

³⁴Before reporting on the situation, the USTR was required to consult the country's own industries. The 1988 amendments also eased the requirements for investigations of imported articles by the US International Trade Commission of breaches of patent rights under s. 337 of the Trade Act of 1974; an additional option for disgruntled US patent owners separate from patent law proceedings in federal district courts. See A. Newman (1989), The Amendments to Section 337: Increased Protection for Intellectual Property Rights, 20 Law & Pol'y Int'l Bus. 1989, 571; S. Sell (2002), Private Power, Public Law: The Globalization of Intellectual Property Rights, pp. 91–95; and United States – s. 337 of the Tariff Act of 1930 (Report by the GATT Panel, 7 Nov 1989) L/6439.

³⁵ See J. Drexl (2015), The Concept of Trade-Relatedness of Intellectual Property Rights in Times of Post-TRIPS Bilateralism, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 53 (this volume).

³⁶ Panel Report, United States – Sections 301–310 of the Trade Act of 1974, WT/DS152/R, adopted 27 January 2000, DSR 2000:II, p. 815.

³⁷ For the current debate on flexibilities in TRIPS and their relation to stricter protection through bilateral FTAs, see e.g., H. Grosse Ruse-Khan (2011), The International Law Relation between TRIPS and Subsequent TRIPS-Plus Free Trade Agreements: Towards Safeguarding TRIPS Flexibilities?, 18 J. Intell. Prop. L. 2011, 485. On the relationship between TRIPS and FTAs see for example: H. Grosse Ruse-Khan (2011), Protecting Intellectual Property under BITs, FTAs, and TRIPS: Conflicting Regimes or Mutual Coherence, in C. Brown & K. Miles (Eds.), Evolution in Investment Treaty Law and Arbitration, pp. 485; R. Hilty & T. Jaeger (2012), Legal Effects and Policy Considerations for Free Trade Agreements: What is Wrong with FTAs, in C. Antons & R. Hilty (Eds.), Intellectual Property and Free Trade Agreements in the Asia-Pacific Region; R. Merges (1990), Battle of Lateralisms: Intellectual Property and Trade, 8 B.U. Int'l L.J. 1990, 239; J. Drexl, H. Grosse Ruse-Khan & S. Nadde-Phlix (2014), EU Bilateral Trade Agreements and Intellectual Property: For Better or Worse?.

³⁸ See J. Drexl, H. Grosse Ruse-Khan & S. Nadde-Phlix (2014), ibid.

visions reinforcing the scope of IPRs, and sometimes extending them beyond WTO agreements.³⁹ The same effect can also be seen in more recent plans for plurilateral FTAs, such as the Trans-Pacific Partnership and the Anti-Counterfeiting Trade Agreement.⁴⁰ Thus already there are countries which may have bound themselves to varying levels of obligation in the IP sphere. This is a complicating phenomenon which may cause a ratcheting up of protection over time, as incremental additions present targets for further rounds of negotiation and debate. Moreover, these sorts of FTA agreements apply well beyond the specific FTA signatories, pursuant to the most-favoured-nation principle that operates generally in international trade law.

5.2 The General Agreement on Tariffs and Trade of 1947

Having glanced ahead to today's world of TRIPS standards, enhanced piecemeal by FTAs agreed between individual countries and regional alliances, we must turn back once more to consider developments on an international level (albeit again driven very much by American trade policy) in the period after 1945. The GATT of 1947 sought to unleash international trade as a major force in the recovery of at least the "western" nations from the tragedies of global war. In particular, the United States, the European Economic Community and Japan (by 1980 the three largest economies of the time) wanted to insist on an arrangement which favoured free international trade over domestic production. In other fora, and eventually in TRIPS, they simultaneously sought to give IPRs wider and more stable recognition in international law than they had gained up to that point, seeing them as exceptions to the general preference for international free and competitive trading. In seven rounds of further GATT negotiations that followed between a growing band of countries, tariffs and subsidies came down step by step; but progress was far from even.

5.3 Revision of GATT: The Uruguay Round 1986–1994

The eighth round of GATT Revision ran from 1986 (at Punta del Este, Uruguay) to 1994 (at Marrakech, Morocco), leading to the establishment of the WTO. It was an era in which the world's largest economy—that of the USA—came under the strains of increasing deficits in its balances of trade in general and with individual

³⁹ C. Antons & R. Hilty (2012), Intellectual Property and Free Trade Agreements in the Asia-Pacific Region.

⁴⁰ Ibid.

⁴¹ There were initially 23 signatory states when the GATT was signed in 1947. By June 2014, there were seven times as many WTO members.

countries. And it was in these very years that the final curtains were being drawn down on the socialised economies and political institutions of Central and East Europe.

The original GATT allowed each member country to take steps to ensure that other members were meeting their obligations under the Agreement. Section 301 of the Trade and Tariff Act was a key mechanism for the US to implement this. But there was a variety of reasons why this regime was far from strong. For example, whether and if so, what, steps countries chose to take could well be influenced by policy issues arising out of foreign affairs, including military and defence options of various kinds.⁴²

A further tightening of the GATT rules and procedures for dispute settlement—initially for counterfeit goods—was one of the key motivations behind the Uruguay Round. In the 1980s this policy goal soon expanded however, when US delegates realised they might be able to deal more generally with the place of IPRs in the "free-trade" framework of GATT, not merely as exceptional instances of exclusivity but as fundamental requirements for trade in knowledge-based goods and services. The USTR's charge over "special 301s" was a major fulcrum of leverage.

6 Shaping a TRIPS Agreement

6.1 The Basic Tenets

The basic tenets which large-scale Western industries fought for so hard in their demands for a TRIPS Agreement to be part of the revised and extended GATT included: (1) that IPRs should be available in all countries across the world that joined the WTO; (2) that the standards of these rights should be set at minimum levels which nonetheless measured up to those already prevailing in free market, industrialised economies; (3) that countries should be permitted in their national or regional laws to apply other more demanding standards; and (4) that variations having the effect of undermining TRIPS standards would not be permissible unless TRIPS itself made allowance for them.

Most of the "flexibilities" in the Agreement were conditioned by the assumption, more prevalent in economically advanced countries then than is the case today, that IPRs were relatively weak weapons in the competitive jungle of "trade"; and that there were gaps and difficulties over the subject-matter that each type of right

⁴² See S. von Lewinski (2015), The WTO/TRIPS Dispute Settlement Mechanism: Experiences and Perspectives, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 603 (this volume).

⁴³ For a description of the dispute settlement process under TRIPS and its relationship with the original GATT dispute settlement process, see C. Correa (2007), Trade Related Aspects of Intellectual Property Rights, pp. 479 et seq.

embraced and over the legal techniques available to enforce them. The leading lobbyists for IPRs provided their governments with alarming descriptions of what out-and-out copiers got up to and depressing estimates of their own consequent losses. Their case was persuasive in relation to foreign countries which lacked any relevant IPRs; so also with countries where rights existed, at least to a limited extent, but could scarcely ever be enforced. The latter could be due to inherent defects in the operation of the courts or IP registration offices of the countries in question; or because of suspicion in such countries of foreign, large-scale enterprises that were intent on seeking hyperbolic prices for their wares in consequence of their IPR ownership.

The IPR protagonists accordingly demanded that, across the proposed WTO system, its Members, including considerable numbers of countries at the beginnings of industrial and commercial development, should have high-standard IPRs in their national or regional law and should also provide clearly defined procedures and remedies that would apply unequivocally to the low-grade, often dishonest, imitators that otherwise collect at the murky end of trade in any country where IPR enforcement is either non-existent in law or nearly so in practice. In reality, intellectual property today has to accommodate many more complex issues than simply quashing parasitical copying of the least justifiable kind.

As already pointed out, the defining function of IP law in any jurisdiction does much to settle what the limits of the protected subject-matter should be. Inevitably this often becomes, at the boundaries, a somewhat arbitrary process because individuals such as judges, and bodies such as legislatures, may reasonably disagree about the likely implications of drawing a line that includes or excludes particular subject matter (for example, patents for computer programs or parts of the human body). The same may well be true of the definition of the activities of unconnected, independent creators and traders that amount to infringement of an IPR, and likewise the details of how enforcement systems should work. All of these tasks may call for reference back to reasons for treating an IPR as justified within the legal limits operating in a country's or a region's economic system. Accordingly, decisions need to be entrusted to people with considerable experience of the various IP fields.

6.2 Massing Forces for a Wide-Ranging TRIPS Agreement

From the late 1970s a determination solidified in the high counsels of capitalist enterprise in the US that the major forms of IPR should be available not just in developed industrial countries but in the great range of countries across the world, whatever their particular stage of economic development. Firms engaged at the forefront of pharmaceutical, agro-chemical, biotechnological, digital and other evolving technologies felt a new unease about rising research and labour costs in their domestic markets. For them unrestricted trade on a global basis could prove highly problematic.

Businesses involved in the production and distribution of literature, artistic work, musical performance, cinematographic film, sonic and audio-visual broadcasting and alternative media, such as cable television, were also perplexed by the spread of cheap electronic copying techniques that could cut into their traditional methods of production and trading. The same businesses were also beginning to sense that a revolutionary storm was brewing over the provision of enormous quantities of information, not just through sale of physical recordings and devices to play them but over purely electronic media such as intra-nets, and even more, inter-nets. Corporate undertakings with heavy investments in branding, with the protection of trade marks and names at their core, were seeing growth in their public recognition and celebrity status on an international scale that was at the heart of rapidly expanding "globalisation"; and nowhere more so than in the merchandising of luxury products and financial services.

6.3 Suspicions in the Developing World

To this must be added a growing discontent with arguments about the future of IPRs, notably at the level of international guardianship. When in 1967 the United Nations established the WIPO as an organisational umbrella for the traditional IP Conventions each member state acquired an equal vote on issues before it. It could claim to have special expertise in its difficult subject. Yet in the post-colonial world after 1945 the number of sovereign states began to increase markedly, many of them being developing countries. Some of these were coming to think about IPRs in the light of their own needs concerning both their domestic and their international trade. Moves to strengthen these accords were increasingly impeded by differences of opinion among developed and developing countries as groups.

Clearly enough an end was approaching to that nineteenth-century willingness of states to tolerate the traditional IP Conventions as some form of soft "law" which left it to sovereign entities to resolve their differences of opinion by negotiation and agreement; failing which a state that fell short of its Convention obligations could get away with doing little or nothing to rectify its defaults.⁴⁴ As already noted, the

⁴⁴No question of compliance with any IP Convention had ever been raised between states before the International Court of Justice at The Hague, despite acknowledgment in those conventions of their entitlement to do so. However, where an international convention conferred sufficiently clear rights on private individuals in member states, the courts of a state might directly apply such rights in domestic litigation. This could happen only where a particular state adopts a monist approach to Convention obligations. But note in relation to TRIPS, and the Uruguay Round of multilateral trade negotiations, the European Council's declaration that "by its nature, the [Uruguay Round] Agreement establishing the World Trade Organization, including the Annexes thereto, is not susceptible to being directly invoked in Community or Member State courts": Council Decision, 94/800/EC of 22 December 1994 concerning the conclusion on behalf of the European Community, as regards matters within its competence, of the agreements reached in the Uruguay Round multilateral negotiations (1986–1994), Official Journal L 336, 23/12/1994 P. 0001–0002 (emphasis added).

United States was beginning to explore bilateral trade treaties as an effective weapon to improve recognition of its own industries' IPRs in developing countries. Equally some other developed countries were encouraging governments of under-developed territories to chase IP infringers through their customs and police services. IP-based industries were glad to encourage and to contribute to the movement when it came to suing infringers, particularly through civil actions to enforce their personal property rights against what they labelled "theft", "piracy" or "counterfeit". 46

6.4 Political Realities in the Negotiations

The literature on the negotiating process by which the Uruguay Round came to contain TRIPS is extensive and animated.⁴⁷ Both scholarly comment and interest group lobbying attracted wide attention and since 1994 that tide has swollen considerably.⁴⁸ The negotiations themselves followed old patterns for reaching multinational trade agreements, in which much of the decision-making process

⁴⁵ See above, Sect. 5.1.

⁴⁶The International Federation of the Phonographic Industry was beginning to demonstrate what could be achieved by working with public authorities in Asian states to clean up high tides of infringing sound recordings. Thus in Hong Kong, while still a British colony, the legislative powers of the police and customs services were tightened to such an extent that the industry could claim that a market containing only 2 per cent of legitimate music cassettes had between 1973 and 1986 become one which was 99 per cent legal: see D. de Freitas (1989), Hong Kong, in S. Stewart (Ed.), International Copyright and Neighbouring Rights, Ch. 25, esp. pp. 816–817. Similar developments took place between independent countries of the same region: see ibid, Chs. 23, 26–30. For example, Singapore enacted in 1968 the Copyright (Gramophone Records and Government Broadcasting) Act to address music piracy. The Act provided that courts must presume the accuracy of affidavits on the subsistence and ownership of copyright, unless the contrary was proved: see Ch. 25 at p. 860.

⁴⁷ In Ullrich (this volume).

⁴⁸ For external literature on the politics of the negotiations: S. Sell (2003), Private Power, Public Law: The Globalization of Intellectual Property Rights, pp. 91–95; P. Drahos (2005), Global Property Rights in Information: The Story of TRIPs and the GATT, 13 Prometheus 2005, 6; A. Menescal (2005), Those Behind the TRIPs Agreement: the Influence of the ICC and the AIPPI on International Intellectual Property Decisions, 2 IPQ 2005, 15; F.-K. Beier & G. Schricker (1989), GATT or WIPO? New Ways in the International Protection of Intellectual Property; F.-K. Beier & G. Schricker (1996), From GATT to TRIPs: The Agreement on Trade-Related Aspects of Intellectual Property Rights; S. Haunss (2011), The Politicisation of Intellectual Property: IP Conflicts and Social Change, 3 WIPO J. 2011, 129–138; P. Gerhart (2007), The Tragedy of TRIPs, Mich. St. L. Rev. 2007, 143; D. Matthews (2011), Intellectual Property, Human Rights and Development: The Role of NGOs and Social Movements.

was shrouded from public knowledge.⁴⁹ Writers have therefore devoted much attention to identifying who pushed hardest to ensure that the final TRIPS text contained what they wanted and excluded what they opposed. The commentators depict how and why governments became so engaged in the Uruguay Round discussions; how private multinationals managed to press their chosen causes despite the 'public' implications;⁵⁰ and how at least some developing countries felt that they needed an IPR agenda which reflected their own experiences but had neither the resources nor the time to make an adequate case in the context of a general revision of the GATT.⁵¹

By 1986 developing countries had had more than 20 years' experience at WIPO of the travails of revising the Paris, Berne and other IP conventions and treaties. So it was only to be expected that, once revision of the GATT to incorporate a TRIPS-type agreement into its new form came under active discussion, they would press for alternative approaches to this single-minded drive to "globalise" IPRs in support of transnational enterprise. Brazil, India and eight other developing countries propounded their view that any such solution should draw WIPO into its core, as the international institution with the necessary expertise to do an adequate job. In this they were by no means alone. Their hope was that any multinational agreement on IPRs would be grounded in adequate knowledge of the vastly differing economic and legal conditions between countries of the "North" and the "South", as these factors

⁴⁹ See e.g. P. Drahos (2002), Negotiating Intellectual Property Rights: Between Coercion and Dialogue, in P. Drahos & R. Mayne (Eds.), Global Intellectual Property Rights: Knowledge, Access and Development, Ch. 10, pp. 166–172; P. Drahos & J. Braithwaite (2002), Information Feudalism: Who Owns the Knowledge Economy?, pp. 10–13.

⁵⁰ See in particular, S. Sell (2003), Private Power, Public Law: The Globalization of Intellectual Property Rights, pp. 91–95.

⁵¹ For literature discussing the difficulties of the TRIPs campaign for developing countries, see: J. Watal (2011), From Punte del Este to Doha and Beyond, 3 WIPO J. 2011, 24; J. Watal (2001), Intellectual Property Rights in the WTO and Developing Countries; C. Deere (2008), The Implementation Game: The TRIPs Agreement and the Global Politics of Intellectual Property Reform in Developing Countries; C. Deere-Birkbeck (2010), Developing Countries in the Global IP system before TRIPS: The Political Context for the TRIPS Negotiations, in C. Correa (Ed.), Research Handbook on Intellectual Property Law and the WTO, pp. 22-51. See also various contributions in D. Gervais (2007), Intellectual Property, Trade and Development: Strategies to Optimize Economic Development in a TRIPs-plus Era, including those of K. Sanders (Ch. 4), P. Yu (Ch. 5), C. Correa (Ch. 6), and I. Mgbeoji (Ch. 7); J. Reichmann (2000), The TRIPs Agreement Comes of Age: Conflict or Cooperation with Developing Countries, 32 Case W. Res. J. Int'l L. 2000, 441; A. George (2006), Globalization and Intellectual Property; W. Pretorius (2002), TRIPS and Developing Countries: How Level is the Playing Field, in P. Drahos & R. Mayne (Eds.), Global Intellectual Property Rights: Knowledge, Access and Development, pp. 183-197. For a discussion of some of the issues currently facing developing countries: G. Ghidini, R. Peritz & M. Ricolfi (2014), TRIPS and Developing Countries: Towards a New IP World Order?.

⁵² Arguments about this issue played a prominent part at the Symposium of the Max Planck Institute for Innovation and Competition (to use its current title) in July 1988, as is recorded in F.-K. Beier & G. Schricker (1989), GATT or WIPO? New Ways in the International Protection of Intellectual Property.

impacted upon the definitions of the various IPRs, upon the time that should be allowed them to decide which to adopt, and upon the terms on which they should be obliged to do so.⁵³ In the countries promoting a TRIPS-type agreement there was some appreciation of the need to take this developing country demand into account, but also a determined resolve to ensure broad and reliable markets for Western knowledge-based industries. In the end newly developing countries were allowed 5 years before most of the TRIPS obligations became binding on them,⁵⁴ and least developed countries were permitted 10 years, or more if the TRIPS Council decided that there was a sufficient case.⁵⁵ To all developing countries, developed countries also promised assistance in drafting new legal provisions and in establishing national systems of IP administration.⁵⁶ And developed countries were obliged to offer incentives in their own territories that would foster the transfer of technology to least developed countries "to create a sound and viable technological base".⁵⁷ As a magic wand this fine language has at best had only a marginal effect.

During 1988, much was heard about the needs of developing countries and the confrontational pressures on them that were arising in the Uruguay Round negotiations. But by the summer of 1989 it was becoming apparent to their representatives that their interests in securing other free trade advantages in a revised and expanded

⁵³ For a description of the issues, see R. Osterfard (2007), Economic Growth and Intellectual Property Rights Protection: A Reassessment of the Conventional Wisdom, in D. Gervais (Ed.), Intellectual Property, Trade and Development: Strategies to Optimize Economic Development in a TRIPs-plus Era, Ch. 3.

⁵⁴C. Correa (2007), Trade Related Aspects of Intellectual Property Rights, pp. 491 et seq. All WTO members had one year to comply with the obligations of TRIPS. Developing countries were allowed an additional period of four years (until 1 Jan 2000), apart from obligations concerning the most-favoured-nation clause (Art. 4), national treatment (Art. 3) and certain other procedural provisions. Least developed countries, however, have been allowed further extensions, currently until 2015. Developing countries also had a further five years (until 1 Jan 2005) to introduce product patent protection in areas of technology that were not already protected in their territory by 1 Jan 2000. Only a few beneficiaries of this provision remained by 2000 because most had introduced protection by this time (p. 493). India, a major producer of generic pharmaceuticals, was one of the few remaining countries, which was a key reason for the adoption of the Doha Decision in 2003 in the twilight of this transitional period, which would continue till 2005.

⁵⁵TRIPS Agreement, Arts. 65, 66(1). There were 32 least-developed countries in 2007, and a further 8 in the process of accession. The 10-year grace period was extended a further ten years by the Doha Decision until 1 Jan 2016 in relation to pharmaceutical patents, and until 1 Jan 2013 in other regards: C. Correa (2007), Trade Related Aspects of Intellectual Property Rights, p. 496. The hardliners of the US pharmaceutical industry had in the end to give up their fight for a "pipeline" protection of patents that would come into effect once, under Art. 27(1), a developing country became obliged to introduce patents for new drugs.

⁵⁶ Art. 67.

⁵⁷ Art. 66(2).

GATT—in many cases concerning their agricultural and textile products—were more urgent than balancing the rules concerning IPRs. So after a period of months rather than years, the agenda for a TRIPS-type agreement that would be directed primarily to the high level demands from western economies became the main basis for further discussion.⁵⁸

Late in 1990, disagreements over agricultural issues brought the GATT negotiations as a whole to a halt. The GATT Secretariat intervened in the hope of getting them re-started and in this it succeeded. So far as concerned TRIPS, the Director-General of the GATT, Arthur Dunkel, took what proved to be the crucial lead by producing his own draft agreement. ⁵⁹ This, he insisted, should be treated as the sole text upon which further negotiation should proceed. A sense of converging momentum grew and replaced a situation where blocs of negotiating countries struggled to find some way of choosing between five separate drafts (from the US, EEC, Japan, Switzerland and India). The Dunkel text also helped iron out some of the differences of opinion between countries of the "North", enabling them to unify broadly on the policy debates, and avoid a stumbling situation of fragmentation. Wrestling with tough issues continued; but this mostly related to specific disagreements between leading industrialised countries—for instance, over the protection of geographical indications of origin, copyright in computer programs and rights in new forms of plant life.

American industries kept up pressure, not only in Congress but through all their routes to the USTR and other branches of their government that were feeding their perspectives into the TRIPS negotiations. Together with industrial and governmental support from the EC and Japan on most issues, they were out to secure the strongest version of the rights they sought. For the more sceptical it might have been clear enough that they were also using, and in all probability would continue to use, bilateral negotiations and agreements on trade–notably over issues that came to prominence through the USTR's "special" condemnations of foreign countries under the Omnibus Trade and Competitiveness Act of 1988. As already pointed out, this could supply an alternative route towards securing through bilateral agreements whatever was refused to the US and its collaborators in the final TRIPS text.

⁵⁸ For example, as to the exclusion of principles of exhaustion under TRIPS, see, e.g., L.M. Genovesi (2010), The TRIPS Agreement and Intellectual Property Rights Exhaustion, in C. Correa, Research Handbook on Intellectual Property Law and the WTO, p. 216. Genovesi describes Art. 6 as "an agreement to disagree" (i.e. a rule that leaves each Member state free to establish its own regime for exhaustion).

⁵⁹ The Dunkel draft Text was released on 20 Dec 1991: A. Taubman, H. Wager & J. Watal (2012), A Handbook on the WTO TRIPS Agreement, pp. 7–8.

⁶⁰ See above Sect. 5.1; and J. Drexl (2015), The Concept of Trade-Relatedness of Intellectual Property Rights in Times of Post-TRIPS Bilateralism, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 53 (this volume).

The dynamics of negotiation being what they were, it was difficult to agree the precise scope of a provision covering one or other IPR. But one unexpected consequence was that even those countries most suspicious of the whole process were forced to concede by inference to the debates that the basic entitlements being built into TRIPS were justifiably there, even though the scope of international law affecting IP had broadened considerably. Another was that, as soon as TRIPS finally became part of the WTO bundle in April 1994, the search was on for the "flexibilities" which could allow TRIPS to develop along its initial lines which would concentrate on removing the threats perceived to be posed by organised counterfeiters, pirates and generic copiers.

7 The Structure of TRIPS

7.1 TRIPS and "Traditional" International Obligations

TRIPS is subservient to the substantive obligations agreed between members of the "traditional" IP Conventions. ⁶¹ It also incorporates many of the provisions found in the Paris Convention of 1967–1968. ⁶² This is significant because there are now 160 WTO Member countries, and the TRIPS text has had to be accepted by all WTO Members. None of the "traditional" IP Conventions in the mid-1980s attracted such a number. ⁶³ The WTO structure does not allow for reservations to be appended after a unanimous proposal by the TRIPS Council and acceptance by the Ministerial Conference; individual Members may not refuse to accept particular provisions, unless the other members all consent. ⁶⁴ The approach to reservations that has complicated the traditional IP Conventions is not followed in TRIPS.

As in the revised GATT of 1994, which carries forward the essential objectives of the whole set of arrangements administered by the WTO, the TRIPS Agreement is subject to a Most Favoured Nation clause. This principle eliminates preferences being given by one Member in favour of nationals of one or more other Members; the clause automatically accords the same benefits to all nationals of Members not so favoured.⁶⁵ Alongside this, the principle of national treatment, long familiar

⁶¹ See TRIPS Arts. 2(2), 3(1). For the WIPO Treaty of 1988 on the Layout of Integrated Circuits and its upgrading in TRIPS itself, see below, Sect. 7.3.

⁶² See TRIPS Art. 2(1).

⁶³ TRIPS Art. 68. Art. 72 prescribes the conditions under which such a review is to take place.

⁶⁴ TRIPS Art. 73.

⁶⁵ GATT 1994, Arts. I and III; TRIPS Arts. 4 and 5. Among the exceptions set out in the two TRIPS Articles, those relating to granting, registration and related procedures under WIPO Conventions, are of basic importance. For the need to observe differences between the GATT and TRIPS provisions on non-discrimination, see H. Grosse Ruse-Khan (2015), IP and Trade in a Post-TRIPS Environment, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 163 (this volume).

from the Paris and Berne Conventions, deals with the limitation upon national and regional IPRs each to their own geographical territories by providing that the nationals of a first Member are entitled to treatment in any other Member that is no less favourable than that accorded to that other Member's own nationals in its domestic law.⁶⁶

7.2 Objectives and Principles: TRIPS Preamble and Articles 7 and 8

The Preamble to TRIPS begins by expressing the desire to "reduce distortions and impediments to international trade" and proceeds, after identifying the need to promote effective and adequate protection of IPRs, to refer also to the need to ensure "that measures and procedures to enforce [IPRs] do not themselves become barriers to legitimate trade." Accordingly the Recitals acknowledge that trade-related IPRs operate within the basic principles of GATT 1994 and earlier IP conventions, and that TRIPS aims to provide adequate standards and principles concerning the availability, scope and use of such IPRs, as well as means for enforcing them effectively while taking into account differences in national legal systems. 68

Among these desiderata, there are further statements concerning the position of developing countries and least developed countries. These relate to transitional arrangements which aim at fullest participation in the results of the negotiations; to developmental as well as technological objectives among the public policies of national states addressing IPR protection; and to the special needs of least-developed Members through "maximum flexibility in the domestic implementation of laws and regulations in order to create a sound and viable technological base." Reference to the particular role of flexibility in aid of those countries which have furthest to go in reaching anything like industrial standards is all very well. But it will strike many as blue-sky talk that says very little about later provisions insisting that national laws must not lower TRIPS minimum standards unless the Agreement itself allows it.

When it comes to more specific obligations, Part I of TRIPS ends with two provisions on Objectives and Principles. Added at the behest of developing country governments, these have become significant points of reference in the final text. The first (Article 7—Objectives) states initially that the protection and enforcement of IPRs should contribute to the promotion of technological innovation and to the

⁶⁶Where TRIPS imposes obligations on its Members by reference to one of the WIPO Conventions, the definition of the criteria for eligibility of "nationals" has to be read as extending to those persons, natural or legal, who would have been nationals had their state been party to the earlier Convention in question: see TRIPS Art. 1(3).

⁶⁷ TRIPS, Rec. 1.

⁶⁸ Rec. 2(b), (c).

⁶⁹ Rec. 2(e), 5, 6; and see Art. 66, already referred to above in n. 54 and 55.

transfer and dissemination of technical knowledge to the mutual advantage of producers and users—up to which point this objective is apparently related to patent systems and lesser similar rights that fall within Part II of the Agreement. Tacked on to this comes the phrase "and in a manner conducive to social and economic welfare, and to a balance of rights and obligations". This addition can perhaps be read as a loose justification for other IPRs, thus also covering copyright and related rights as well as trademarks and unfair competition. Certainly there could have been some more definite statement of the objectives that justify these rights.

More significantly, Article 8 states two Principles. The first allows Members "to adopt measures necessary to protect public health and nutrition, and to promote the public interest in sectors of vital importance to their socio-economic and technological development". The second Principle allows Members to introduce appropriate measures, where needed, to prevent right holders from abusing their IPRs, or from engaging in anti-competitive practices that unreasonably restrain trade or adversely affect the international transfer of technology. However, these principles can be relied upon only where the measures at issue are consistent with the TRIPS Agreement—a pre-condition which is eminently capable of either wide or narrow interpretation.

The first Principle in Article 8 would become a vital point of reference in the immense controversy which TRIPS would engender once it took effect: the demand that patented drugs for use in the treatment of illnesses such as HIV and AIDS should be made available at prices that developing countries could afford in fighting these conditions as epidemic disasters. Even so, the arguments put by the leading pharmaceutical manufacturers against any such qualification of the standard impact of the patent system as an incentive to research, led in the end to a messy compromise in the Doha Decision, which has not formally taken effect as a TRIPS amendment even a decade later.⁷¹

The second principle reinforces principles of competition law beyond the field of impermissible licensing terms (which are covered by Article 40(1) and (2)). Article 8 must also allow domestic law measures against abuses of dominant position or acts of monopolisation by a leading undertaking. More than that, it may well be relevant to discussions of whether the rules in TRIPS must be interpreted so that they give due weight to conflicting values in international

⁷⁰ Art. 7. To have expressed this objective in terms of "shall", rather than "should", would have introduced the supererogatory notion that each right would become questionable once its lack of practical success could be established. In patent law, such issues can already be addressed by a legal requirement that the claimed invention be capable of industrial application from the start.

⁷¹ Art. 31bis; for which see below, text to n. 124 and 125.

⁷² See further in Bakoum and Conde (this volume). On the scope to which TRIPS protects undisclosed information and controls anti-competitive practices in contractual licences, see: K. Maskus & J.H. Reichman (2005), International Public Goods and Transfer of Technology under a Globalized Intellectual Property Regime Part IV, section 2 (essays by Drexl, Ullrich, Fox, Fink, Janis and Ghosh); A. Taubman, H. Wager & J. Watal (2012), A Handbook on the WTO TRIPS Agreement, pp. 126–134.

conventions or national and regional laws, or that reflect the changes and challenges in novel technology or commercial practice.

7.3 Treatment of the Types of IPR Within TRIPS Part II

The ambitions of TRIPS exceed anything previously agreed concerning IPRs in multinational obligations between states. ⁷³ Under the framework provisions that make up Part I, members must accept that the types of intellectual property covered by the Agreement are those set out in the seven sections of Part II. Those with broadest coverage in terms of subject matter are: Copyright and Related Rights, Patents, Industrial Designs, Trademarks and the Protection of Undisclosed Information. Much more specifically, TRIPS also deals with Geographical Indications, and Layout-Designs of Integrated Circuits.

Regarding the last two, it is enough here to say that, so far as concerns Geographical Indications (GIs), TRIPS included a scheme for dealing with GIs in so far as they affect wines and spirits⁷⁴ Mediterranean States of West Europe were demanding a high level of protection, which they already had in national law; but the United States saw little advantage in giving enterprises rights in names for goods that had acquired a reputation associating them with the geographical conditions of their area of production.⁷⁵ As for integrated circuit designs, the WIPO Treaty on the subject had been completed in 1989; but because the maximum duration for the subject-matter was restricted to 8 years, it was not attracting sufficient signatories to enter into force, being rejected most notably by Japan and the US (the two nations that had the largest trade in world terms). TRIPS was used

⁷³ For leading commentaries on the drafting history of TRIPS and the resultant shifts in international intellectual property protection, see J.C. Ross & A. Wasserman (1993), Trade-Related Aspects of Intellectual Property Rights, in T.P. Stewart (Ed.), The GATT Uruguay Round: A Negotiating History 1986–1992, pp. 2241–2334; C. Correa (2007), Trade Related Aspects of Intellectual Property Rights; D. Gervais (2012), The TRIPS Agreement: Drafting History and Analysis; UNCTAD-ICTSD (2005), Resource Book on TRIPS and Development, pp. 1–17; C. Clift (2010), Why IPR Issues were Brought to GATT: A Historical Perspective on the Origins of TRIPS, in C. Correa (Ed.), Research Handbook on Intellectual Property Law and the WTO, pp. 10–21.

⁷⁴ But for other products no consensus could finally be reached. TRIPS, Art. 23. Cf. TRIPS, Art. 22; and see H. Grosse Ruse-Khan (2015), IP and Trade in a Post-TRIPS Environment, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 163 (this volume).

⁷⁵ For the complexities of the negotiations, see, e.g., Gervais, op. cit., paras. 2.289–2.313.

for a rescue operation and introduced a requirement that protection should last for at least 10 years. ⁷⁶

A drafting technique throughout TRIPS is that each of its Part II Sections includes a definition of the relevant subject-matter, coupled with statements of the scope and duration of the rights. These set the minimum levels of protection which Members are left free to exceed, though not to reduce, if no exception fits the case. The weighting in favour of IPRs is the foundation of so much that follows. The main result is that all Members of TRIPS must either introduce provisions *ab initio* into their domestic law or they must alter their existing laws, so as to ensure that each type of IPR listed in Part II comes up to the level prescribed for it in TRIPS. How they achieve this within their own legal system and practice lies with them, so long as they do not contravene TRIPS itself. The legislative and administrative burdens that this requirement imposes on many developing and least-developed countries, has often been greater than they, in their inexperience, could have anticipated. The legislative and interpretable that the properties of the part II comes up to the level prescribed for it in the properties of the properties of the part II comes up to the level prescribed for it in the properties of the part II comes up to the level prescribed for it in the properties of the part II comes up to the level prescribed for it in the properties of the part II comes up to the level prescribed for it in the properties of the part II comes up to the level prescribed for it in the part II comes up to the level prescribed for it in the properties of the part II comes up to the level prescribed for it in the part II comes up to the level prescribed for it in the part II comes up to the level prescribed for it in the part II comes up to the

The substantive "outline" of each IPR covered in Part II of the TRIPS text is partly achieved by reliance on definitional provisions in the traditional IP Conventions, and partly by borrowing expressions from elsewhere (not least from the eclectic experience of introducing European Community versions of the main forms of IP and at the same time harmonising the parallel national laws of Member States). It has become likely that a Dispute Settlement Body of the WTO or a national or regional court or other body seeking to interpret TRIPS will consider understandings of what the earlier use of words and phrases has been taken to mean, by reference not just to decisions at the WTO level and to national case law directly deciding on the meaning of TRIPS text, but by any knowledge that can be gleaned about the emergence of TRIPS through the course of negotiations that led to

⁷⁶TRIPS, Art. 35; and see, e.g., Gervais, op. cit., pp. 539–550.

⁷⁷ See above n. 37. This general approach is to be found in Art. 1.1. It is reiterated in particular instances, e.g. Art. 33 laying down that the potential term of a patent shall not end before twenty years from its filing date. For the argument that today such provisions should be regarded as setting maximum standards of protection: see A. Kur (2015), From Minimum Standards to Maximum Rules, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 133 (this volume).

⁷⁸ Occasionally the text states desirable minima which members are left free nonetheless either to exceed or to reduce in certain respects. See for instance the obligation to protect industrial designs in Art. 25.

⁷⁹By 1995, there were more Members in the latter than the former category: J. Watal (2001), Intellectual Property Rights in the WTO and Developing Countries.

⁸⁰ Art. 1(1).

⁸¹ See above n. 51–57.

adoption of the final form of words. 82 Accordingly we offer comments on the nature of TRIPS changes in relation to the four major types of IPR identified above.

7.4 Authors' Copyright, Related Rights of Performers and Investors

Turning more precisely to what this means for specific IPRs we may note that the Berne Convention, as it had been elaborated by revisions up to its Paris version of 1971, contained a range of provisions affecting authors' rights in general under the domestic copyright laws of Member States; it was not confined to international aspects of the rights. Accordingly in TRIPS, Members of the WTO are obliged to observe Articles 1–19 of Berne without setting them out *in extenso* in TRIPS.⁸³ Thus the period of protection generally prescribed in the Berne Convention, Article 7, is for the author's life and 50 years thereafter and this level of protection must be observed by all WTO Members.⁸⁴ At particular points, however, TRIPS has added to the requirements of Berne, notably by adopting a version of the dichotomy which allows copyright to arise in expressions but not in "ideas, procedures, methods of operation or mathematical concepts as such."85 A further addition was the provision requiring that computer programs be treated as literary works for copyright purposes. Compilations of information can be similarly treated, but this is only so where the compiler's selection or arrangement constitutes an "intellectual creation". 86 Negotiations also resulted in a requirement that a rental right be accorded in respect of commercialised computer programs and cinematographic works, because in Japan rental businesses were not previously under any obligation to pay licence fees to the original developers of the material rented out. 87 To fall within this new

⁸² For the approaches to interpretation that have been employed by Dispute Settlement Panels and in appeals therefrom, see S. von Lewinski (2015), The WTO/TRIPS Dispute Settlement Mechanism: Experiences and Perspectives, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 603 (this volume).

⁸³ TRIPS Art. 9(1). The one exclusion was of Berne Art 6bis which requires Member countries to include protection for two moral rights of authors – the right to be named as author and the right to object to changes in the work that would reflect badly on the author's integrity. This provision was treated as not sufficiently "trade related", which put on one side the reality that experts from civil law countries believed in these moral rights as articles of faith, while common law experts tended to considerable scepticism about their value.

⁸⁴ There are a number of qualifications to this in the Convention (see, e.g. Art. 2(7), dealing with works of applied art, etc.), and it is accepted that countries may exceed the prescribed period in their own law, as has happened by the extension of the post mortem period to seventy years in the US, the EU and elsewhere.

⁸⁵ TRIPS Art. 9(2).

⁸⁶ Art. 10. It was only in this latter field that the "originality" needed in most national laws for a work to be copyright, was referred to.

⁸⁷ Art. 11.

TRIPS right as it related to films, however, the claimant became obliged to show that rental had led to "widespread copying...materially impairing the exclusive right..."

As to the adoption of exceptions and limitations upon copyright, Berne had already introduced a somewhat abstract formula in relation to the right of reproduction, known to *aficionados* as the "three step test". TRIPS extended its application to all the rights included within authors' copyright:

Members shall confine limitations or exceptions to certain special cases [Step 1] which do not conflict with a normal exploitation of the work [Step 2] and do not unreasonably prejudice the legitimate interests of the right holder [Step 3].

More than that, however, the TRIPS negotiators accepted that similar clauses, adapted to some extent to fit the different subject-matter, should impose equivalent restraints on derogations from the rights in trade marks, industrial designs and patents. In a variety of situations there are now Dispute Settlement Reports and court decisions that stress that these textual formulae must be given limited interpretation because that is inherent in their very nature as exceptions. Rationalisation of this sort, however, can all too readily become just a way of arriving at a preference between two (or more) policy options that each need to be weighed and considered for their respective merits and disadvantages.

As to the neighbouring rights of performers, phonogram producers and broad-casting organisations, Article 14 establishes obligations that match those of the Rome Convention of 1961 or are otherwise similar to those in that Convention. The latter are concerned in particular with the need to take account of the fact that the rights of phonogram producers have the status only of related rights to authorial copyright, while US law treats them as authorial "works". 92

7.5 Trade Marks and Names

As for IPRs that are classified as "industrial property" in the Paris Convention, it is evident that interstate issues predominate, rather than issues relating to the main provisions of domestic laws. By the mid-nineteenth century leading producers of a considerable range of goods were facing waves of counterfeiting in which goods were being labelled with their marks despite there being no connection between them. Legislators and courts responded in various ways, the French creating an official trade mark register in 1857 which over time attracted attention across

⁸⁸ Also provided in Art. 11.

⁸⁹ Art. 13.

⁹⁰ Arts. 26(2) and 30.

⁹¹ See especially, D. Gervais (2012), The TRIPS Agreement: Drafting History and Analysis, p. 279–92, 336–340, 418–420, 472–475.

⁹² For the details, see D. Gervais (2012), The TRIPS Agreement: Drafting History and Analysis, p. 301–309.

Europe. Its tendency was to characterise the registered mark as distinct and separate "property" which would remain in existence so long as the registration continued to be renewed. 93 Other states were not willing to go so far and looked instead to protection against dishonest adoption of better-known marks from case-law that embodied delictual liability against unfair competition. Many countries in the end recognised both forms of protection, though different balances between them would remain in domestic laws and there was little interest in adopting international standards in order to secure "approximation of laws".

Where the Paris Convention had some impact in the field of trade marks and names was in 11 Articles which almost all addressed aspects of marks in international trade and services. Pagistered marks were deemed to be separate for each territory of registration, and could not be invalidated because they were not also filed in their country of origin. The originating country is described in the Paris Convention in somewhat old-fashioned terms, but it remains the starting point for application of the principle of national treatment to registered marks. This has needed careful adaptation which has limited the grounds on which domestic laws may nonetheless exclude registration or maintain subsequently an application initiated in a different country of origin. Where the mark was indeed registered in its country of origin, would the proposed mark be likely to infringe a third party's prior registration? Would the mark applied for be "devoid of any distinctive character" or would it exclusively consist of a description (as broadly defined) of the product or service? Would it be contrary to morality or public order; and, in particular, would it be of a nature to deceive the public?

Because of continuing tensions between states that had in the past applied a "deposit" approach to registration and those which required a preliminary examination of the merits, it had not proved possible to establish any scheme that would allow an initial registration to be simply extended to other Paris states. Instead a smaller circle of Paris Members had become participants in such a scheme under a Madrid Agreement of 1891. 98 There is, however, a Paris provision that an obstacle

⁹³ For details of the development, see A. Kur (1996), TRIPS and Trademark Law, in F.-K. Beier & G. Schricker (Eds.), From GATT to TRIPs: the Agreement on Trade-Related Aspects of Intellectual Property Rights.

⁹⁴ The Paris Convention, Arts. 5C, 6bis – 6septies, 7–10bis. One substantive provision in Paris was the obligation to protect marks for services, though not necessarily by registration. This was introduced in Art. 6sexies. Another was the obligation to protect trade names, likewise without the need for filing or registration: see Art. 8. It may well therefore be treated as a TRIPS obligation under the general importation of Paris obligations by virtue of TRIPS, Art. 1(3).

⁹⁵ Art. 6.

⁹⁶ Art. 6quinquies.

⁹⁷ Art. 6quinquies B.

⁹⁸ Madrid Agreement for the International Registration of Marks. The initial system provided for a single attack designed to invalidate the registration for all the countries designated. Numerous states objected to such 'centrism'; only in 1989 was a Protocol added to avoid this and certain other objections, thus allowing the Madrid system to expand.

to the registration of a mark shall in no case arise from the nature of the goods to which it is to be applied. Equally there is a limited provision against "mark-squatting". Where a mark had become so well-known as a brand for specified goods in one or more Paris Convention countries that it was publicly recognised as such in a Member State elsewhere, registration in the latter state in favour of some interloper could be refused or withdrawn, or use of it there for the same or similar goods could be prohibited. The interloper's motive for jumping in ahead was often simply to sell the mark to the owner of the brand because of the transnational reputation that it enjoyed from trade elsewhere. Even so, the evidential burden of proving that the brand was well-known in a country where it was not yet used by the brand owner could create considerable difficulties.

Thus it was left to TRIPS itself to undertake the first international definition of a trademark. Article 15 did so with some sophistication, treating signs as being trademarks if they were capable of distinguishing the goods or services of one undertaking from those of other undertakings, but leaving it to national laws to decide how far the capacity to distinguish can be made apparent by evidence of use for this purpose, rather than by any inherent characteristic. This reflected developments that were part of the Lanham Act of the US and equally the harmonising effects of the EC's First Trade Mark Directive to be applied to the national law of Member states, the small-scale collaboration of the Benelux system and the foundations for the EC's Union-wide trademark registration system. Sanguine lobbyists assumed that the EC's intervention was intended to remove constrictions in the scope of the law of Member states, but the European Court of Justice has been alert to rule against what it regards as undue broadening of trade mark rights. For instance it has taken care to circumscribe rights in signs that appeal to senses other than vision—i.e. sound, smell, taste and touch—which deserve to remain open to use by traders in general. 101

Against this background, one can consider the TRIPS contribution to trade mark law, which leaves so much essential detail to national and regional norms, as mainly improving the international scope of the core elements of trade mark protection, and reinforcing protection for well-known marks. Broadly speaking, this protects trade mark owners against the production and marketing of branded goods of the same or a similar nature and/or appearance. There is probably no great scope for adding to

⁹⁹ Art. 7. The provision refers only to the act of registration, not to subsequent invalidation (cf Art. 6quinquies B). It would not be correct to apply it to a requirement that information (other than the mark itself) be excluded, or included, in advertising or information—as with plain packaging of tobacco products (for which see M. Davison (2012), The Legitimacy of Plain Packaging under International Intellectual Property Law, in T. Voon, A. Mitchell & J. Liberman (Eds.), Public Health and Plain Packaging of Cigarettes: Legal Issues.

¹⁰⁰ Art. 6bis. The practice foreshadowed today's "cyber-squatting" of internet domain names, concerning which, over the last two decades, WIPO has pioneered an international electronic dispute settlement regime.

¹⁰¹ See, e.g., W. Cornish et al. (2010), Oxford History of the Laws of England, Vol. 13, pp. 708–735.

the current TRIPS approach in this field. Given, for instance, the long debate that there has been about whether trade mark rights should extend beyond cases of "confusion" of marks to cases merely of "association" between them, it is surely inappropriate that it should be resolved at the level of an international law obligation. New experiments in extending the scope of rights, including details of how to apply for registration or object to it, should be left to develop with the benefit of real experience, at least initially, in the most developed national and regional markets. Whether it is then appropriate to introduce any extended version of trade mark law to developing countries should then be a question they consider domestically in accordance with the general understanding in their own territories of how trade marks and similar signs are treated by their own populations.

7.6 Patents for Inventions

In dealing with patents, the Paris Convention appears to parallel its impact on trade marks in many respects. The priority dating steps already mentioned allow applications to government offices in different countries to be spread over a given time period, rather than all needing to be made on the same day. ¹⁰² This was particularly important for filing applications for patents, because of the complexity involved in determining whether the claim made in the application could be justified as being patentable subject-matter. Also fundamental was the provision for national treatment to be afforded to applicants who were nationals of one Paris Union country when they sought protection for the same invention in another contracting state under its domestic law. 103 The participating states were not entitled to treat the patent as forfeited simply because the patentee or a licensee did not work it in that state. Instead the state had, if possible, to grant a compulsory licence and it could only do so after 4 years had elapsed from application or 3 years since grant (whichever was later). Forfeiture was reserved for cases where compulsory licensing did not offer a viable solution. 104 At no stage did the Paris Convention seek to define the concept of patentable invention, any more than it attempted to lay down what would amount to infringement of a patented product or a product made by deploying a patented process, or the duration of patent protection. 105 These remained matters for the national law of each Paris Union state. 106

¹⁰² See above Sect. 4.2.

¹⁰³ The Paris Convention, Arts. 2, 3.

¹⁰⁴ The Paris Convention, Art. 5A. Forfeiture could only occur after two further years.

¹⁰⁵ A short but heterogenous list of matters had accumulated, touching such secondary considerations as independence of patents for the same invention in different Union countries (The Paris Convention, Art. 4bis); naming the inventor (Art. 4ter); restoration of lapsed patents (Art. 5bis); exceptions concerning patented inventions on vessels, aircraft, etc. temporarily in a Union state (Art. 5ter); and importation of articles made by a patented process in another Paris state (Art. 5quater).

¹⁰⁶ Or in Europe the regional granting conditions contained in the European Patent Convention of 1973.

Compared with the limited controversy surrounding trade marks, the impact of TRIPS on patent law was far more tempestuous. The pharmaceutical and agrochemical industries were focussed particularly on the profitability of successful products. These products were often very costly to identify and put through successful evaluation and safety trials, however from this point on manufacturing costs were likely to be low and the products easily copied by competitors. Only with patent protection and therefore a high level of pricing could firms sustain margins of overall profit from the lottery-like prospects of picking such "winners". The chances of becoming and remaining an industry leader were far from evident. The policy choices could be specially controversial when it came to treatment of illnesses that were reaching epidemic proportions in developing countries, the prime instance 20 years ago being HIV/AIDS, followed by malaria and tuberculosis. Hence it was in such fields that top executives were ready to lead political campaigns on a global basis to extend the rules of patent systems that were being established in leading capitalist countries. We will concentrate attention on those provisions of TRIPS that became most important for them to embrace in their campaigning.

The TRIPS provision on the duration of patents requires all WTO Members to adopt a term of at least 20 years from the date of filing for protection in the state in question. 107 This was longer than the period of protection offered previously by many member states, particularly developing countries, which typically preferred novel technology (usually owned by foreigners) to pass into their territory's public commons after a shorter period of protection. In any case the term of medicinal and agro-chemical patents in national systems was becoming open to further extension. Because commercial exploitation of a novel drug or aid to plant growth has today to be authorised by a domestic or a regional authority in order to ensure the safety of patients and consumers, the early years of a patent could pass before that permission to market was obtained by the patentee, thus reducing the incentive to invent. There was accordingly a straightforward case that Members should be permitted to extend the duration of the patent in order to compensate for such period of lost marketing as could occur in particular cases. Unsurprisingly the US was the first country to have introduced such a scheme. 108 It was followed, even before the WTO Agreements became legally operative, by the European Communities, which created

¹⁰⁷ The requirement applied to all types of patentable technology. In the great majority of countries, it would operate in conjunction with the 'first-to-file' concept, which is taken both to determine the validity of a particular applicant's claim to be the inventor and to be the point from which the term of the patent would be measured, whatever delays there might still be in arriving at a merchantable product (see further below Sect. 7.7). The preference in US law of treating the 'first-to-invent' as the person initially entitled to grant (which had much to do with the earning power of patent attorneys in that country) was not touched in TRIPS and would not be altered until 2013 by virtue of the America Invents Act of 2011: for which see, D. Chisum (1997), Chisum on Patents, Vol. 3A, ¶ 10.10−10. 10(4)(d).

 $^{^{108}}$ Ibid., Vol. 5, ¶ 16.05, discussing the Drug Price Competition and Patent Term Act of 1984, s. 156.

Supplementary Protection Certificates that could attach to the national patents for pharmaceuticals issued in or for each EU State and those that will in due course be available under the EU Unitary Patent. TRIPS says nothing to inhibit the introduction of such schemes, which have a significant impact on the market entry of generic medicines.

A further controversy arose in relation to the clinical trial data necessary to secure permission to market a pharmaceutical drug from a relevant public authority. The market applicant (in particular one who is seeking or already holds a patent for a novel and non-obvious product or process) must produce considerable evidence that a new medicine is safe and effective. When the patent reaches its expiry date, generic imitators of the product similarly must satisfy the marketing authority that their product is safe and effective. ¹¹⁰ If they could rely on the evidence presented by the original patentee to this effect, they would be obliged only to show that their active ingredient was the same substance or a bioequivalent of the patentee's product. They would not have to face the delays and costs of running their own clinical trials to recapitulate what the patentee had already shown when the drug was new and before it was first marketed.

On the other hand if generic imitators could not call for the earlier evidence to become part of their case, they would have to bear their own clinical trial costs and delay. This delay has significant economic benefits for developers of original drugs, which they particularly value if they did not manage to market their drug in the first few years of patent protection. But it also has a significant impact on patients and health professionals who on the one hand appreciate the need to pay for innovative developments through the patent system, but on the other are keen for prices to ease as soon as possible after the expiry of patent protection.

Solutions to this problem have tended to concentrate on the use that the marketing authorities make of information in the earlier application when reaching its decision whether to grant market authorisation to a subsequent applicant. In NAFTA, the three North American parties took a position sympathetic to the leading pharma companies: Section 1711(6) of that Agreement provides that a subsequent applicant for marketing authority may not rely on evidence submitted by a first applicant until a reasonable period (normally 5 years) has elapsed. TRIPS did not offer such a generous approach to the initial patentee's position.

¹⁰⁹ See CIPA (2011), CIPA Guide to the Patents Acts, paras. 128B.01-81.

¹¹⁰ There has been much controversy over whether generic producers could manufacture and administer a still patented drug in order to test their own product's safety and thus be ready to apply for marketing authority at once after expiry was disputed. The question has remained one for national or regional law, since TRIPS did not include a list of permissible exceptions which inter alia related to research purposes.

¹¹¹ This delay would add to any extension of the patent term which a particular system allowed by way of compensation for delay in granting authority to market.

¹¹² NAFTA, Art. 1711(6).

Instead, as we shall see, it started from the question, how far was the original trial data submitted on the basis of confidentiality. ¹¹³

Turning next to the requirements for a valid patent, TRIPS also entered new international law territory when it specified that, for an invention to be patentable, it should be new, non-obvious and useful in a broad technological sense; 114 and that the patent specification should disclose the invention completely and clearly enough for a person skilled in the art to carry it out. 115 In this it was mainly accepting the basic criteria of leading modern patent systems, which had mostly abandoned additional requirements, such as no prior use by the applicant, technical advance in the subject, and (unless a Member such as the US chose otherwise) disclosure of the best method of performing the invention. 116 What is more, however, a requirement of "non-discrimination" among technologies was added to the basic characteristics of patentable subject-matter. This was done largely in order to suppress older tendencies in some patent systems to exclude medicinal and food production inventions, or even product claims to chemicals in general, from patentability altogether or else to impose limits on prices by giving the state-wide powers to grant compulsory licences to unrelated producers to work within the patent claims.

No attempt is made in TRIPS to exclude claims to insufficiently "technical" subject-matter. In omitting this, TRIPS departs from the lead provided in the European Patent Convention (EPC), which precludes such matters as discoveries, mathematical methods, business methods, aesthetic creations, computer programs and schemes for the presentation of information (each of them "as such"). 118 However, TRIPS does expressly permit national and regional laws to exclude other categories of invention that mainly relate to life sciences: subject-matter that is contrary to *ordre public* or morality; 119 methods of medical treatment of humans or animals; and exclusive claims to plants and animals other than micro-

¹¹³ See below, Sect. 7.7.

¹¹⁴ TRIPS, Art. 27(1).

¹¹⁵ Art. 29(1).

¹¹⁶ Ibid.

¹¹⁷ Art. 27(1).

¹¹⁸ EPC (2000), Art. 52(2) and (3). There is now extensive case-law on the meaning of these Articles. It is unlikely that this omission would be held to prevent Members from including such criteria in their own patent law. It could, for example, be implied in the notion that patents are to be available for "inventions".

¹¹⁹ TRIPS Art. 27(2). This links with the principle of Art. 8(1), allowing members to adopt measures necessary inter alia to protect health and nutrition (see above Sect. 7.2). Other exceptions can also be justified but only if they satisfy the "two-step test" for patents laid down in Art. 30.

organisms and essentially microbiological processes for their production. ¹²⁰ The EPC had already required these exclusions in its contracting states. ¹²¹

TRIPS supplies some definition of the acts that constitute infringement by an unauthorised person in two lists. The first covers patents for products: making, using, offering for sale, selling or importing; the second list deals with patents for processes: using the process; and offering for sale, selling or importing at least the direct product of the process. ¹²² In Article 30, TRIPS also incorporated a "two-step" test allowing *limited* exceptions to the exclusive rights over patentable subject matter if the exceptions do not unreasonably conflict with a normal exploitation of the patent and do not unreasonably prejudice the legitimate interests of the patent owner, taking account of the legitimate interests of third parties."

As mentioned earlier, Article 8 of TRIPS can be read as justifying, on grounds of public health, by-passing the restraints on exceptions imposed by the Two-step Test in Article 30:¹²³ but this could only happen if the 12 conditions on compulsory licensing specified in Article 31 are being observed. Any compulsory patent licence granted by a WTO-Member government must accordingly be non-exclusive and provide for adequate remuneration to the patentee in the particular circumstances. Of these, condition (f) provides that any use by a state of its compulsory licensing power should be "predominantly for the supply of the domestic market of the Member authorizing the use". This means that in a country where there is manufacturing capacity for the patented activity, no licence can be imposed where the bulk of production is for export to another Member where there is no such capacity, whether or not there is an equivalent patent for that territory. Accordingly, a country like India or Canada could not put in place a compulsory licence to supply drugs to a country like Rwanda (which is classified as 'least developed') or Sri Lanka (which is developing but does not have local firms with the necessary manufacturing facilities).

This exception—which first took effect as a temporary waiver of Article 31(f)—has since been incorporated into the more elaborate Article 31*bis* and approved by the Ministerial Conference as an amendment of TRIPS. But to become operative it needs a two-thirds majority of Members and the level of confirmation remains stubbornly below that. Meanwhile the temporary waiver has been used only once. 124

¹²⁰ As to patents for plants—a subject which raises important policy issues regarding the supply of food, clothing and fodder—Art. 27(3)(b) attempts in convoluted language to require their protection either under a patent system or a sui generis system such as that regulated internationally by the UPOV Convention. See C. Antons (2015), Article 27(3)(b) TRIPS and Plant Variety Protection in Developing Countries, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 389 (this volume).

¹²¹ See now EPC 2000, Art. 53.

¹²² Art. 28.

¹²³ By omitting the need for a "special case", Art. 30 reduces the test to a two-step. The consequences of this are hard to predict.

¹²⁴ Notification by Canada October 8th, 2007: Document 07-4285.

7.7 Other Exclusive Rights Affecting Innovation

Various countries with well-defined patent systems had by 1995 admitted legal developments that ran in parallel with invention patents. One was for some type of "petty patent", of which the German Gebrauchsmuster (utility model) was the best-known example. As with patents, the objective was to provide incentives both to innovation itself and to improving the range of knowledge about innovation for industries as a whole, but to do so at a lower level of "inventiveness" and for a shorter period of exclusivity. The Paris Convention includes exclusive rights of this general category; ¹²⁵ but they were not of great importance to most transnational backers of the TRIPS initiative and they found no place in it. Also broad in its coverage is the industrial design right, registered or unregistered; but this form of IPR will be relevant to technical innovation only where the particular system not only provides exclusivity for novelties in the appearance of products but also extends this to cases where the purpose of the design is dictated essentially by technical or functional considerations. ¹²⁶

The protection of trade secrets was a much more important field of development in terms of scope than the cases mentioned in the last paragraph. Long before, as the first decades of industrial production occurred in leading economies, demands began to be heard for exclusive rights of some kind in both technological and commercial secrets. Carefully guarded recipes for foodstuffs, drink and "medicines" became the subject of litigation that might be based on contractual promises, but might also have effects between strangers who had no such ties. The patent system apparently offered little help in gaining this objective since international patent laws typically refer to rights being conferred on the patent owner or applicant (rather than "the inventor"); and while sufficient disclosure is regarded as a necessary part of the *quid pro quo* for the grant of a patent, this rule does not usually distinguish between those who gain knowledge of the invention through imitation or independent effort.

Where the purpose of a relationship between firms was to transfer technology, it was common for the core technological ideas to be disclosed by the patent specification, while secondary matters would be passed on by the supplier as secret know-how. To permit such arrangements to operate, whereby a novel invention is "sufficiently disclosed" to the public (as was required for a valid patent), while adding that other information was revealed only on terms of secrecy (when that could actually be achieved) might seem a curious instance of having one's own cake while eating it. But it had proved to be such a useful practice in various

¹²⁵ The Paris Convention, Art. 1(2).

¹²⁶ TRIPS, Arts. 25, 26.

industries that some form of legal protection had to be admitted. ¹²⁷ Accordingly in both civil law and common law legal systems, courts granted relief against misusing or making unauthorised disclosures of secrets of many different kinds. The jurisdictional basis for such intervention by courts tended to be ill-defined and to turn on the policy instincts of judges about what should be treated as industrial or commercial dishonesty or misappropriation.

By the latter twentieth century, the demand for trade secret protection of a quasiproprietary kind was growing exponentially, not least because digital technology ratcheted up the capacity for storing massive banks of information, while at the same time deploying all sorts of electronic wizardry to restrict access to it. TRIPS negotiators became well-enough aware of the pressure and as a result a neat piece of drafting combined elements of the Paris Convention and TRIPS to give a solution that could require the spread of trade secret protection around all WTO countries.

In 1927 the Paris Convention, Article 10bis, was amended to require its parties to have in their domestic law effective protection of one competitor against acts by another which were contrary to honest practices in industrial or commercial matters. In line with this, three illustrations were initially given and remain in place: (1) causing confusion with the complaining competitor: (2) discrediting the latter's business; or (3) misleading the public about the qualities of goods. ¹²⁸ TRIPS Article 39(1) and (2) add to this base a further instance: the need for protection of undisclosed information or data, in the sense that it is secret (i.e., not generally known in relevant circles); that it has commercial value in consequence; and that it has been reasonably protected by the person lawfully in control of it. 129 These provisions on trade secret protection amount to a moderate summary of some of the characteristic requirements of legal proceedings brought by one person to prevent use or disclosure of trade secrets which are present in numerous legal systems as a sub-head of legal liability for unfair competition or a sui generis legal entitlement to protection. As occurs generally in TRIPS the obligation to observe the Paris Convention is expanded beyond its own Union of contracting states by being made applicable to all WTO states. 130

¹²⁷ The issue caused much debate in the US in mid-twentieth century; but liberal refusals to allow a form of obligation based on secrecy beside a patent system requiring adequate disclosure eventually gave way to the possibility of cumulative protection in the US Supreme Court's jurisprudence: see Kewanee v. Bicron, 416 U.S. 470 (1974).

¹²⁸ May the goods be their own, or the complainant's or even a third party's? The Article gives no answer.

¹²⁹ A Note (a) to Art. 39(2) further defines what may constitute "a manner contrary to honest commercial practices". But nothing further is said about "what is not generally known in relevant circles", even though it is often the central factor dividing the parties – notably in cases between an employer and a former employee.

¹³⁰ See above fns. 61 to 63. See further, F. Henning-Bodewig (2015), TRIPS and Corporate Social Responsibility: Unethical Equals Unfair Business Practices? in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 701 (this volume).

TRIPS Article 39(3) propounds its own solution to the problem of a generic producer of a patented substance who seeks to rely on evidence originally supplied to a marketing authority by the original patentee on terms of confidentiality. ¹³¹ The Sub-article applies solely to "products which utilise new chemical entities". If the complainant's own application had included "undisclosed test or other data, the origination of which involves a considerable effort", then a Member must protect it not only against "unfair commercial use" but also against disclosure that is not necessary to protect the public or concerning which "steps are taken to ensure that the data are protected against unfair commercial use". The whole sub-article is a contorted piece of drafting, as this last phrase shows; so its future in the hands of dispute settlement bodies and judges is unpredictable. It appears that it can have no application even where the product is "new", if the question for which the marketing authority consults the earlier data concerns the chemical structure of the active ingredient and has been revealed either by a patent specification or by reverse analysis of the product. Beyond this in most instances the test results previously submitted may be taken to justify the safety of the product. This may be significant with complex chemical entities (eg therapeutic proteins), but the first successful grant of marketing authority should often be enough to justify permitting the marketing of other simple variants. It is certainly not settled that under the trade secret laws of many countries a marketing authority could then be under an obligation not to use the information in the processing of the third party's application for admission to the market. 132

If Article 39(3) is not to lead to the conclusion that almost always reliance by the marketing authority on earlier information received by it in confidence remains "unfair commercial use"—a conclusion which would apparently deprive it of practical effect—many detailed factors might be drawn into account with the aim of settling what is "fair". The question of interpretation might be put to a Dispute Settlement body of the GATT by one Member against another; but that ploy must run a risk of getting the "wrong" answer. In the meantime any national court hearing an action between individual competitors that turns on the text of Article 39(3) or of domestic implementation of its content should not be afraid to view the wording as too obtuse to be given any broad "purposive" meaning that curtails the ability of a generic imitator to enter business as soon as possible after any patent on the drug has expired.

Apart from this contrary effect on the durational limit to a patent, the only exclusive right that could continue thereafter might lie in conditions of secrecy that

¹³¹ The novelty of the chemical entity must presumably be judged at the time of the first application or the first lawful marketing thereafter. It must be doubted whether the requirements of any patent law concerning anticipation would be taken to supply the necessary criteria: see C. Correa (2010), Data Exclusivity for pharmaceuticals: TRIPS standards and industry's demands in free trade agreements, in C. Correa (Ed.), Research Handbook on Intellectual Property Law and the WTO, pp. 718–727.

¹³² To the contrary, for example, is the important decision of Justice Gummow of the High Court of Australia, Smith Kline & French v Department of Health (1991), 99 Australian L.R. 679.

the patentee would have sought to attach to the evidence concerning safety that it originally submitted.

8 The Processes for Enforcement of IPRs Against Infringers

8.1 Types of Legal Proceeding

One immediate aim of the TRIPS negotiators and those who strove to influence them was to set international minimum standards for the content of the various IPRs that operated at a national or regional level. Allied to this was a further intent—that of securing a harmonisation of approach at an international level where up to 1995 there had been significant differences in domestic laws. These intertwined purposes were important to right holders because of the expectation that, as in the past, the rights would mostly be enforced in civil proceedings brought by them. Part III of TRIPS, which is directed at the enforcement of IPRs, deals first with civil process instituted by IPR holders; it adds some detailed provisions on securing the aid of customs authorities in seizing and destroying infringing imports; and in a single article reference is made to criminal process. ¹³³

8.2 Preferences of Industries

With the spread of IP piracy and counterfeiting after 1950, the distractions and costs of enforcement that IPR holders faced began to grow markedly. Industry associations sprang up which sought to make legal processes more efficient at their various stages. Broadly these included: detection of infringers and the channels of distribution that they used; procedures for legal proceedings up to the completion of trial and judgment; and the enforcement of sanctions once liability was established. The legal reinforcements that major right holders sought through TRIPS Part III had a great deal to do with these processes. TRIPS thus requires "expeditious remedies to prevent infringements and remedies which constitute a deterrent to further infringements". However it also notes the need to "avoid the creation of barriers to legitimate trade and . . . provide for safeguards against their abuse". The procedures must be fair and equitable; they may not be unnecessarily complicated or costly; nor

¹³³ TRIPS, Art. 61. See C. Geiger (2015), Towards a Balanced International Legal Framework for Criminal Enforcement of Intellectual Property Rights, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 645 (this volume).

¹³⁴ See the rather blousy terms of TRIPS' general clause on the subject (Art. 41(1)).

can they entail unreasonable time-limits or unwarranted delays.¹³⁵ As part of this, the elements of due process are to be observed, with TRIPS mentioning expressly the right of those accused to know the evidence against them and to respond to it; and likewise the right to have an administrative decision reviewed by judicial authority, at least so far as concerns questions of law.¹³⁶

8.3 Civil Process and Border Restraints

As to civil proceedings before national and regional courts, Members have to provide judicial authorities with power to grant provisional measures before a final judgement, notably injunctions to prevent infringement of IPRs (when occurring or imminent) and to preserve evidence of this conduct. ¹³⁷ In blatant cases, they may intervene without prior notice to the alleged infringer; but there must then be prompt notice and a hearing if it is sought. ¹³⁸ A range of requirements are placed upon applicants to satisfy the court that there is sufficient evidence against the defendant of wrongdoing and to notify the court of relevant information. 139 If a provisional order is revoked, withdrawn or is held to involve no infringement, the defendant may claim compensation for injury caused. ¹⁴⁰ All of this draws on the experience in common law jurisdictions which introduced and then adjudicated on the fairness or otherwise of interim search and seizure orders and injunctions restraining the removal of assets. In practice these interim procedures have significant enough trade consequences to cause many defendants to settle their dispute, rather than press on for a trial—one important explanation of why large-scale right holders continue to favour civil process over criminal prosecution. ¹⁴¹ If a case does continue to trial, TRIPS has moderate provisions on the granting of final injunctions, the award of damages, the recovery of profits, the award of costs and other remedies. 142

¹³⁵ TRIPS, Art. 41(2).

¹³⁶ Art. 41(3), (4). Art. 41(3) also expresses a "preference" for reasoned judgments that are in writing and are based only on evidence given in the case. But since US courts still sit with juries (under constitutional guarantee), in civil as well as criminal jurisdictions, this provision could scarcely be made mandatory.

¹³⁷ TRIPS, Art. 50(1).

¹³⁸ Art. 50(2), (4).

¹³⁹ Art. 50(3), (5), (6).

¹⁴⁰ Art. 50(7), (8).

¹⁴¹ Criminal remedies are required in TRIPS (by Art. 61) for wilful trademark counterfeiting and copyright piracy on a commercial scale. Beyond this the question is left to Members: see C. Geiger (2015), Towards a Balanced International Legal Framework for Criminal Enforcement of Intellectual Property Rights, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 645 (this volume).

¹⁴² Art. 44-47.

9 Dispute Settlement Between WTO Members: Procedures and Potential Sanctions

9.1 Older Approaches

The "traditional" IP Conventions acknowledged the possibility of referring disputes over the scope of their international obligations as contracting states to the International Court of Justice in The Hague, to the extent that the Court was accorded jurisdiction as an international institution. No use was ever made of these powers. ¹⁴³

The original GATT contained a more detailed regime for the airing and resolution of intergovernmental disputes between its member states. Each member state was under an obligation to give sympathetic consideration to, and allow adequate consultation about, matters affecting the operation of the agreement. Allegations of nullifying, impairing or impeding conduct could be the subject of written representations which required sympathetic consideration towards an agreed solution. Failure to resolve the differences could lead to the issue being referred to the Contracting Parties as a whole—plainly a very considerable undertaking. A great deal continued to turn on the reaction of the state accused of a violation of its obligations.

9.2 Post-TRIPS

In the Uruguay Round, the question of tightening the GATT system for dispute settlement as a whole was actively canvassed. Because intergovernmental disputes could be anticipated particularly in the TRIPS field, the revised mechanisms attracted particular interest as the WTO commenced its administration. There has indeed been some resort to the mechanisms, not least those established in the elaborate Dispute Settlement Understanding. Silke von Lewinski presents a full analysis of the intellectual property issues that have been contested and the extent to which they have been settled by negotiation before or after a Dispute Settlement Panel has been established. The number of these proceedings and the issues that they have raised have tended to be relatively modest in nature—as might well have been predicted from the earlier history of the question. It is enough here to mention the prospect as it stood as the Revised GATT came formally into effect.

¹⁴³ See above n. 44.

¹⁴⁴ Subsequent procedures were governed by the GATT 1947, Arts. XXII, XXIII.

¹⁴⁵ See S. von Lewinski (2015), The WTO/TRIPS Dispute Settlement Mechanism: Experiences and Perspectives, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 603 (this volume).

10 Conclusions

Any study of the continuing potential of TRIPS needs to be based on sufficient understanding of its pre-history and of its gestation within the Uruguay Round of GATT revision. This chapter has sought to contribute towards that understanding by highlighting the long-running oscillation amongst government and trade policy experts between free trade and protectionism, and the succession of situations and decisions that shaped the terms of TRIPS in the redesigned GATT administered by the WTO. It has also drawn attention to the gradual emergence of international IPR norms, which has rarely been smooth, and which has for much of its pre-history been regarded as a separate, specialist arena for innovation policy.

TRIPS was undoubtedly a product of its time. A whole range of factors combined to produce an outcome that was resounding in some respects, while it remained muted in others, and vague and uncertain in yet others. Those who lobbied for TRIPS most persistently came from a range of transnational industries which aimed to strengthen protection of the IPRs most germane to their fields. Their demands brought positive responses from those with political ambitions to reduce the negative balances of trade that by the 1980s the US and other Western countries were suffering. These developed economies were beginning to lose out to rising stars of the developing world, notably in Asia and Latin America, which had the undeniable example of Japan before them. This was happening just as major capitalist countries were seeing enticing advances in exploitable knowledge from which they could profit under conditions of globalised production and distribution. They soon spotted the chance of going beyond merely reinforcing trade mark and copyright rules against counterfeiters and pirates.

Despite a number of unresolved controversies TRIPS restated a broad panopoly of IP principles typically found in the national or regional law of advanced nations. In modes that were parasitic or eclectic, the Agreement portrayed IP policy as an essential cornerstone for international trade in knowledge-based industries; but it did so at a relatively abstract level and proceeded to treat the standards as minimum fences of protection that all WTO trading partners should erect and maintain, leaving them capable of further strengthening at domestic levels. A great deal of crucial detail in those laws would remain for national or regional legislatures and courts to devise and administer, but subject nevertheless to the general proposition that TRIPS standards were not to be undercut, save where limitations or exceptions were stated in TRIPS itself or for sufficient reason were to be implied from it.

All countries that joined the WTO were thus obliged to respect the definitions of IP rights and their scope in TRIPS Part II; equally they should do the same for the Part III provisions on enforcement measures. A high proportion of all countries, a total considerably larger than the numbers of states participating in the Paris or Berne Conventions before 1986, undertook these obligations, showing that they foresaw sufficient advantages for their innovative industries in international trading on GATT terms—a motivation which, pretty clearly, was a powerful enough attraction even for developing countries that could not see much at the time by

way of direct advantage to themselves in taking TRIPS on board. TRIPS accordingly extended intellectual property laws horizontally across a very high proportion of national territories; and likewise vertically, by imposing standards of protection that in essence were much closer than before to those deployed by industrialised states for their individual and mutual benefits.

In this way, TRIPS embodied a rough-and-ready statement of IP policy that could be executed once on a major scale. But, save at relatively few sensitive touch points, it was not something that could be adjusted at regular intervals. After 20 years in operation, the Agreement is likely to be seen as an achievement favouring transnational enterprises that were at the time of its drafting particularly prey to product and process copying from smaller operators—in particular operators that could be dealt with only by suppressing their infringing activities, rather than by drawing them into collaborations under IP licences.

The overview in this chapter leaves to subsequent contributions the many complications that came with the introduction of TRIPS obligations in actual practice. By this approach one may capture the two-dimensional simplicity that TRIPS advocates believed would be the outcome of their proposals. Readers may well find the criticisms in the subsequent essays to underscore considerable gaps between initial expectations embodied in the TRIPS plan and subsequent difficulties of putting that plan into action, whether they are addressed by generating international norms through the intercession of the WTO or the WIPO, or through the laborious business of striking intellectual property standards as terms in trade agreements negotiated between national governments or their regional agents.

References

Antons, C. (2015), Article 27(3)(b) TRIPS and Plant Variety Protection in Developing Countries, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles (p. 389), Heidelberg: Springer (this volume)

Antons, Ch. & Hilty, R. (2012), Intellectual Property and Free Trade Agreements in the Asia-Pacific Region, Berlin: Springer

Beier, F.-K. & Schricker, G. (1989), GATT or WIPO? New Ways in the International Protection of Intellectual Property, Weinheim: VCH

Boadu, F. & Shen, J. (1997), An Empirical Analysis of the Growth and Autonomy of the Office of the United States Trade Representative, 6 Currents 1997, 3, Houston: South Texas College of Law

Chang, H. (2002), Kicking Away the Ladder: Development Strategy in Historical Perspective, London: Anthem

Chisum, D. (1997), Chisum on Patents, Vol. 3A, Irvine: NexisLexis

CIPA (2011), CIPA Guide to the Patents Acts, 7th ed., London: The Chartered Institute of Patent Attorneys

Clift, C. (2010), Why IPR Issues were Brought to GATT: A Historical Perspective on the Origins of TRIPS, in C. Correa (Ed.), Research Handbook on Intellectual Property Law and the WTO, pp. 10–21, Cheltenham: Edward Elgar

Cornish, W. et al. (2010), Oxford History of the Laws of England. Vol. 13, Oxford: Oxford University Press

- Cornish, W., LLewelyn, D. & Aplin, T. (2013), Intellectual Property: Patents, Copyright, Trade Marks & Allied Rights. 8th ed., London: Sweet & Maxwell
- Correa, C. (2010), Research Handbook on Intellectual Property Law and the WTO, Cheltenham: Edward Elgar
- Correa, C. (2007), Trade Related Aspects of Intellectual Property Rights, Oxford: Oxford University Press
- Davison, M. (2012), The Legitimacy of Plain Packaging under International Intellectual Property Law, in T. Voon, A. Mitchell & J. Liberman (Eds.), Public Health and Plain Packaging of Cigarettes: Legal Issues, Cheltenham: Edward Elgar
- de Freitas, D. (1989), Hong Kong, in S. Stewart (Ed.), International Copyright and Neighbouring Rights, pp. 816–817, 2nd ed., London: Butterworths
- Deere, C. (2008), The Implementation Game: The TRIPs Agreement and the Global Politics of Intellectual Property Reform in Developing Countries, Oxford: Oxford University Press
- Deere-Birkbeck, C. (2010), Developing Countries in the Global IP system before TRIPS: the Political Context for the TRIPS Negotiations, in C. Correa (Ed.), Research Handbook on Intellectual Property Law and the WTO, pp. 22–51, Cheltenham: Edward Elgar
- Dinwoodie, G.B. & Dreyfuss, R.C. (2012), A Neofederalist Vision of TRIPs: The Resilience of the International Intellectual Property Regime, Oxford: Oxford University Press
- Drahos, P. (2005), Global Property Rights in Information: The Story of TRIPs and the GATT, 13 Prometheus 2005, 6, London: Routledge
- Drahos, P. (2002), Negotiating Intellectual Property Rights: Between Coercion and Dialogue, in P. Drahos, R. Mayne (Eds.), Global Intellectual Property Rights: Knowledge, Access and Development, Ch. 10, pp. 166–172, London: Palgrave Macmillan
- Drahos, P. & Braithwaite, J. (2002), Information Feudalism: Who Owns the Knowledge Economy?, pp. 10–13, London: Earthscan
- Drahos, P. & Mayne, R. (2002), Global Intellectual Property Rights: Knowledge, Access and Development, pp. 183–197, London: Palgrave Macmillan
- Drexl, J. (2015), The Concept of Trade-Relatedness of Intellectual Property Rights in Times of Post-TRIPS Bilateralism, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles (p. 53), Heidelberg: Springer (this volume)
- Drexl, J., Grosse Ruse-Khan, H. & Nadde-Phlix, S. (2014), EU Bilateral Trade Agreements and Intellectual Property: For Better or Worse?, Berlin: Springer
- Duncan, L.J. (1997), From Privileges to the Paris Convention, Unpublished PhD-Thesis, Monash University
- Dunham, A.L. (1930), The Anglo-French Treaty of Commerce of 1860 and the Progress of the Industrial Revolution in France after Napoleon, Ann Arbor: University of Michigan Press
- Geiger, C. (2015), Towards a Balanced International Legal Framework for Criminal Enforcement of Intellectual Property Rights, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles (p. 645), Heidelberg: Springer (this volume)
- Genovesi, L.M. (2010), The TRIPS Agreement and Intellectual Property Rights Exhaustion, in C. Correa, Research Handbook on Intellectual Property Law and the WTO, p. 216, Cheltenham: Edward Elgar
- George, A. (2006), Globalization and Intellectual Property, Farnham: Ashgate
- Gerhart, P. (2007), The Tragedy of TRIPs, Mich. St. L. Rev. 2007, 143, East Lansing: Michigan State University College of Law
- Gervais, D. (2007), Intellectual Property, Trade and Development: Strategies to Optimize Economic Development in a TRIPs-plus Era, Oxford: Oxford University Press
- Gervais, D. (2012), The TRIPS Agreement: Drafting History and Analysis, 4th ed., London: Sweet & Maxwell
- Ghidini, G., Peritz, R. & Ricolfi, M. (2014), TRIPS and Developing Countries: Towards a New IP World Order?, Cheltenham: Edward Elgar

- Grosse Ruse-Khan, H. (2011), Protecting Intellectual Property under BITs, FTAs, and TRIPS: Conflicting Regimes or Mutual Coherence, in C. Brown & K. Miles (Eds.), Evolution in Investment Treaty Law and Arbitration, pp. 485–515, Cambridge: Cambridge University Press
- Grosse Ruse-Khan, H. (2011), The International Law Relation between TRIPS and Subsequent TRIPS-Plus Free Trade Agreements: Towards Safeguarding TRIPS Flexibilities?, 18 J. Intell. Prop. L. 2011, 485, Athens: The University of Georgia School of Law
- Grosse Ruse-Khan, H. (2015), IP and Trade in a Post-TRIPS Environment, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles (p. 163), Heidelberg: Springer (this volume)
- Haunss, S. (2011), The Politicisation of Intellectual Property: IP Conflicts and Social Change, 3 WIPO J. 2011, 129, Geneva: WIPO
- Henning-Bodewig, F. (2015), TRIPS and Corporate Social Responsibility: Unethical Equals Unfair Business Practices? in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles (p. 701), Heidelberg: Springer (this volume)
- Hilty, R. & Jaeger, T. (2012), Legal Effects and Policy Considerations for Free Trade Agreements: What is Wrong with FTAs, in C. Antons & R. Hilty (Eds.), Intellectual Property and Free Trade Agreements in the Asia-Pacific Region, Berlin: Springer
- Kur, A. (1996), TRIPS and Trademark Law, in F.-K. Beier & G. Schricker (Eds.), From GATT to TRIPs: The Agreement on Trade-Related Aspects of Intellectual Property Rights, Weinheim: VCH
- Kur, A. (2015), From Minimum Standards to Maximum Rules, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles (p. 133), Heidelberg: Springer (this volume)
- Malbon, J., Lawson, C. & Davison, M. (2014), The WTO Agreement on Trade-Related Aspects of Intellectual Property Rights: A Commentary, Cheltenham: Edward Elgar
- Maskus, K. & Reichman, J.H. (2005), International Public Goods and Transfer of Technology under a Globalized Intellectual Property Regime Part IV, section 2, Cambridge: Cambridge University Press
- Matthews, D. (2011), Intellectual Property, Human Rights and Development: The Role of NGOs and Social Movements, Cheltenham: Edward Elgar
- Menescal, M. (2005), Those Behind the TRIPs Agreement: The Influence of the ICC and the AIPPI on International Intellectual Property Decisions, 2 IPQ 2005, 155, London: Sweet & Maxwell
- Merges, R. (1990), Battle of Lateralisms: Intellectual Property and Trade, 8 B.U. Int'l L.J. 1990, 239, Boston: Boston University
- Newman, A. (1989), The Amendments to Section 337: Increased Protection for Intellectual Property Rights, 20 Law & Pol'y Int'l Bus. 1989, 571, Washington D.C.: Georgetown University Law Center
- Ohly, A. (2015), TRIPS and Consumer Protection, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles (p. 681), Heidelberg: Springer (this volume)
- Osterfard, R. (2007), Economic Growth and Intellectual Property Rights Protection: A Reassessment of the Conventional Wisdom, in D. Gervais (Ed.), Intellectual Property, Trade and Development: Strategies to Optimize Economic Development in a TRIPs-plus Era, Oxford: Oxford University Press
- Pretorius, W. (2002), TRIPS and Developing Countries: How Level is the Playing Field, in P. Drahos & R. Mayne (Eds.), Global Intellectual Property Rights: Knowledge, Access and Development, pp. 183–197, London: Palgrave Macmillan
- Ricketson, S. (2015), Commentary on the Paris Convention for the Protection of Industrial Property, Oxford: Oxford University Press
- Ricketson, S. & Ginsburg, J. (2006), International Copyright and Neighbouring Rights: The Berne Convention and Beyond, Vol. 1, 2nd ed., Oxford: Oxford University Press

- Reichmann, J. (2000), The TRIPs Agreement Comes of Age: Conflict or Cooperation with Developing Countries, 32 Case W. Res. J. Int'l L. 2000, 441, Cleveland: Case Western Reserve University School of Law
- Ross, J.C. & Wasserman, A. (1993), Trade-Related Aspects of Intellectual Property Rights, in T.P. Stewart (Ed.), The GATT Uruguay Round: A Negotiating History 1986–1992, pp. 2241–2334, London: Kluwer Law and Taxation
- Schumpeter, J.A. (1955), History of Economic Analysis, London: Allen & Unwin
- Sell, S. (2002), Private Power, Public Law: The Globalization of Intellectual Property Rights, Cambridge: Cambridge University Press
- Stewart, S. (1989), International Copyright and Neighbouring Rights, 2nd ed., London: Butterworths
- Stewart, T.P. (Ed.), The GATT Uruguay Round: A Negotiating History 1986–1992, London: Kluwer Law and Taxation
- Stoll, T., Busche, J. & Arend, K. (2009), Trade-Related Aspects of Intellectual Property Rights, Leiden, Boston: Martinus Nijhoff
- Taubman, A., Wager, H. & Watal, J. (2012), A Handbook on the WTO TRIPS Agreement, Cambridge: Cambridge University Press
- Trebilcock, M.J., Howse, R. & Eliason, A. (2013), Regulation of International Trade, 4th ed., London: Routledge
- UNCTAD-ICTSD (2005), Resource Book on TRIPS and Development, Cambridge: Cambridge University Press
- von Lewinski, S. (2015), The WTO/TRIPS Dispute Settlement Mechanism: Experiences and Perspectives, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles (p. 603), Heidelberg: Springer (this volume)
- Voon, T., Mitchell, A. & Liberman, J. (2012), Public Health and Plain Packaging of Cigarettes: Legal Issues, Cheltenham: Edward Elgar
- Watal, J. (2011), From Punte del Este to Doha and Beyond, 3 WIPO J. 2011, 24, Geneva: WIPOWatal, J. (2001), Intellectual Property Rights in the WTO and Developing Countries, The Hague: Kluwer

The Concept of Trade-Relatedness of Intellectual Property Rights in Times of Post-TRIPS Bilateralism

Josef Drexl

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Abstract In 1994, by concluding the TRIPS Agreement as part of the new WTO system, states recognized the "trade-relatedness" of IPRs. Yet scholars have so far

Prof. Dr. Josef Drexl, LL.M. (UC Berkeley) is Director of the Max Planck Institute for Innovation and Competition, Munich, and Honorary Professor at the Ludwig-Maximilians-University of Munich.

Max Planck Institute for Innovation and Competition, Munich, Germany e-mail: josef.drexl@ip.mpg.de

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given very little attention to this concept. This chapter identifies three aspects of this idea, namely (1) as a legal concept, (2) as an economic justification for more advanced international IP standards, and (3) as a political strategy. During the last decade, this concept also migrated to many bilateral trade agreements in which "TRIPS-plus" standards were included. This development not only confirmed and strengthened the trade-relatedness of IPRs, it also requires a reassessment of the concept in order to judge the appropriateness of IP bilateralism. Indeed, the main research question of this chapter relates to the soundness of combining IP rules with trade rules. Whether this combination makes economic sense can be critically reviewed in the light of several considerations of economic theory. This economic analysis shows how the international IP system, starting with TRIPS and continuing with bilateral trade agreements, had to develop towards an inefficient expansion of IP protection. From the perspective of 2014, the conclusion is that the strategy to use trade concessions as a bargaining chip for higher IP standards for the purpose of promoting the competitiveness of technologically more advanced countries has not produced the expected results. The chapter strongly argues for reconsidering the current trade policy of technologically more advanced countries to push through ever-higher levels of protection in various forms of trade agreements.

1 Introduction

In 1994, when the Contracting Parties of GATT decided to bring intellectual property rights (IPRs) under the new umbrella of the World Trade Organization (WTO), they justified this by labelling the new IP rules contained in the TRIPS Agreement as "trade-related". The reasons for this characterization most likely stemmed from public international law concerns. With regard to the already existing World Intellectual Property Organization (WIPO) as a specialized international organization that administers and develops the system of international IP law based on a series of Conventions and treaties, the Contracting Parties of GATT obviously felt the need to justify the inclusion of IP issues in the new WTO law.

Yet it would be wrong to perceive the "trade-relatedness" of IPRs only from a legal angle. Above all, TRIPS is the result of international politics driven by certain economic interests that were dominant at that particular point in time. In 1994, many states considered that there was a need to promote higher standards of IP protection that should be respected globally, and that such standards could be pushed through by the common interest of all trading nations in trade liberalization. In more recent years, the development of international IP has moved from multilateralism to bilateralism. So-called "TRIPS-plus" standards can be found in

¹ On the negotiations in retrospect see J. Watal (2011), From Punta del Este to Doha and Beyond: Lessons from the TRIPs Negotiating Processes, 3 WIPO J. 2011, 24.

numerous bilateral trade agreements.² This new "IP bilateralism" does not at all express a shift from uniformity to a belief in the need for more differentiated IP standards. Rather, this bilateralism is to be explained by the political economy. Certain trading nations are convinced that it is easier to push for ever-higher standards of IP bilaterally. Hence, the idea of the trade-relatedness of IP seems to be more alive than ever. Only the institutional framework in which it expresses itself has considerably changed over the last decade.

This development has attracted major critique for quite some time. Starting in 1994, many nations subscribed to TRIPS although they were of the opinion that the "substantive" TRIPS standards were not in their economic interest. With the emergence of bilateral "TRIPS-plus" standards, critics have become even more outspoken and can be found in all different parts of the world. The failure to get the Anti-Counterfeiting Trade Agreement (ACTA), which was negotiated between "like-minded" nations, ratified in the European Union, after mass demonstrations in several major cities of a number of Member States, is perhaps the most obvious expression of a widespread feeling that IP protection has gone too far. Critical views nowadays prevail among IP scholars throughout the world. These views are also shared by an increasing number of firms, not least of which are those active in the new Internet economy, that show at best an ambivalent attitude towards IP.

Concerns about the development of the international IP system were very clearly expressed, for instance, some years ago when 180 experts from 32 countries met for a Global Congress on Intellectual Property and the Public Interest, which was organized in Washington, D.C. by American University, Columbia University, the Geneva-based International Center for Trade and Sustainable Development (ICTSD) and Google. In particular, this congress recommended a re-examination of IP law by balancing the extension of IP with the public interest within all institutional settings. With the following words, the preamble of this congress's final declaration presented the rather dark conclusion that IP has developed in a completely wrong direction:

The last 25 years have seen an unprecedented expansion of concentrated legal authority exercised by intellectual property rights holders. This expansion has been driven by governments in the developed world and by international organizations that have adopted the maximization of intellectual property control of a fundamental tenet.⁴

² For an analysis of the full picture of such agreements see X. Seuba (2013), Intellectual Property in Preferential Trade Agreements: What Treaties, What Content?, 16 J. W. Intell. Prop. 2013, 240. The picture becomes even more complex and, hence, less transparent, if the bilateral investment treaties are also taken into account. See H. Grosse Ruse-Khan (2011), Protecting Intellectual Property under BITs, FTAs, and TRIPs: Conflicting Regimes or Mutual Coherence, in K. Miles & C. Brown (Eds.), Evolution in Investment Treaty Law and Arbitration, p. 485.

³ This critical literature can hardly be listed in its entirety. For a relative early publication, based on a conference that took place at Duke University in 2003, see K.E. Maskus & J.H. Reichman (2005), International Public Goods and Transfer of Technology Under a Globalized Intellectual Property Regime.

⁴ The Washington Declaration on Intellectual Property and the Public Interest, adopted at American University Washington College of Law, Washington, D.C. on 27 August 2011.

Against the backdrop of such critique, the concept of the "trade-relatedness" of IPRs appears as a most interesting topic for research on the occasion of the 20th anniversary of the conclusion of TRIPS as part of the WTO Agreement. This critique hardly seems to impress the governments of the economically and technologically more advanced nations. They have never changed their IP policy and continue to push for ever-higher standards of IP by using trade concessions as a bargaining chip. Yet the international economy has developed and changed enormously since 1994, also as a consequence of the establishment of the WTO system. Hence, there is a clear need to revisit the concept of the trade-relatedness of IPRs. Thereby, what interests here is not so much the question of whether the decision in favour of concluding TRIPS 20 years ago was in the interest of certain states or even of global economic welfare. Rather, this chapter explores the economic and political rationale underlying TRIPS, how the economic and political framework has changed by taking into account the trend towards bilateralism in particular, and, finally, whether there is a need for the developed countries in particular to reconsider their "IP trade-related policy" for the future.

In the following analysis, this chapter will describe the concept of traderelatedness of IPRs from a legal, economic and political perspective at different stages of the development. Accordingly the following three aspects need to be distinguished: first, as enacted in the TRIPS Agreement, the concept of traderelatedness of IPRs expresses a legal concept with concrete legal implications. Second, the term "trade-related" indicates an economic justification for bringing IP under the umbrella of the multilateral trading system. And third, the concept is the creature of a political strategy for attaining certain goals in the negotiating process. These three aspects are closely intertwined, but still need to be distinguished. On the one hand, any legal analysis of the "trade-relatedness" of IP rules needs to take account of the economic justification for having such rules and the political strategy that leads to such rules in order to better understand the role and the effect of these rules in the development of the international systems for IP and international trade. On the other hand, distinguishing between these three aspects provides a useful analytical framework that helps to better assess the soundness of the regulation of international IP as it developed from the conclusion of TRIPS in 1994 to the new era of IP bilateralism.

In the following, the analysis will first go back to the year 1994 and describe the concept of the trade-relatedness for the IP rules included in the TRIPS Agreement (at Sect. 2 below). In the following part, this chapter will analyse how the concept of trade-relatedness of IPRs developed through bilateral trade agreements (at Sect. 3 below). This will be followed by an assessment of this concept in the light of considerations of economic theory (at Sect. 4 below). In the final part, this chapter will assess the concept of the trade-relatedness of IPRs from the perspective of 2014 and conclude that the political strategy of technologically more advanced countries to enhance their international competitiveness thorough including ever-higher IP standards in internationally agreements has ultimately failed (at Sect. 5 below).

2 The Concept of "Trade-Relatedness of IPRs" in 1994

The trade-relatedness of IPRs as it is enacted in TRIPS can first be understood as a legal concept. But, in 1994, there were also economic reasons why the Contracting Parties of GATT decided to combine IP rules with trade rules. And finally the combination with trade rules expresses a political strategy that enabled developed countries to implement higher standards of IP protection internationally.

2.1 Trade-Relatedness of IPRs Under TRIPS as a Legal Concept

The use of the concept of trade-relatedness in TRIPS has foremost a legal dimension. It places certain IP rules into the legal context of world trade law with specific legal consequences. This legal understanding of the concept, however, remains rather formal in the sense that TRIPS does not define any substantive criteria that would allow for distinguishing between trade-related and non-trade-related IP rules. Yet a discussion about what kind of rules have to be considered as trade-related, as well as which rules must not be considered as trade-related, nevertheless took place during the negotiations when the Contracting Parties of GATT strongly disagreed as to what rules can and should be included in the new agreement. With the conclusion of TRIPS, this discussion has lost its meaning. By accepting IP rules as "trade-related" in TRIPS all of these rules became binding on the WTO Members as a matter of public international law. This is not contradicted by the existence of WIPO. Neither the WIPO Convention of 1967 nor any of its substantive IP treaties prevent WIPO Member States from concluding IP-related agreements outside of WIPO that do not collide with the substantive obligations of the WIPO treaties.

But the fact that TRIPS brings IP rules under the umbrella of WTO law has important consequences. All rules that regulate the trade-related aspects of IPRs in

⁵ On those differences see J. Watal (2011), From Punta del Este to Doha and Beyond: Lessons from the TRIPs Negotiating Processes, 3 WIPO J. 2011, 24, 25–27. While, for instance, the US advocated the adoption of "adequate" substantive standards that provide for "effective IP protection", India argued that only the application of competition law to IP can be considered as traderelated since IPRs as legal monopolies necessarily restrict trade. See the Suggestion by the United States for Achieving the Negotiating Objective, MTN.GNG/NG11/W14 of 1988, p. 3; Normes et principes concernant l'existence, la protée et l'exercise des droits de propriété intellectuelle qui touchent au commerce, Communication de l'Inde, MTN.GNG/NG11/W/37 of 1989, pp. 1 et seq. See also J. Drexl (1990), Entwicklungsmöglichkeiten des Urheberrechts im Rahmen des GATT, pp. 328 et seq., 365 et seq.

⁶ Article 19 of the Paris Convention expressly authorizes the countries of the Paris Union to conclude IP agreements between themselves provided that these agreements do not contravene the Paris Convention. Article 20 of the Berne Convention allows countries of the Berne Union to provide for more extensive protection by entering into agreements between themselves insofar as these agreements are in conformity with the Berne Convention.

the sense of TRIPS can become an object of trade disputes that can be dealt with in the framework of the WTO dispute settlement procedures. This can work in two different directions: first, WTO Members that do not comply with the TRIPS provisions can be brought before the WTO dispute settlement bodies and may be sanctioned by a denial of concessions made to them, for instance by banning imports of goods that are not even remotely related to the IP-related dispute. Second, violations of WTO law outside intellectual property can also be sanctioned by an authorization of the injured WTO Member to suspend its own obligations under TRIPS.⁷

While TRIPS does not affect the "international IP competence" of WIPO, an issue of competence arose in Europe. When the European Communities signed the WTO Agreement, a decision needed to be made whether exclusive competence of the European Communities for the common commercial policy under ex-Article 113 EC Treaty (Maastricht version) would suffice to enable the European Communities alone to become a Member of the WTO also on behalf of its Member States or whether both the European Communities and the EU Member States would have to conclude the WTO Agreement as a so-called mixed agreement. To answer this question, in its Opinion 1/94, the former European Court of Justice (ECJ) preferred a narrow reading of Article 113 and only confirmed exclusive competence of the EC with regard to the rules concerning border control measures against the import of counterfeit trademark and pirated copyright goods. 8 It is only with regard to these rules that the protection on IP specifically relates to international trade. 9 With regard to the other provisions that are designed to strengthen IP protection, in the light of the internal competence of the European legislature to set rules, the Court only confirmed joint competence of the EC and the Member States to conclude TRIPS. ¹⁰ The ECJ also provided an important reason for this view. Since the rules and procedures for the adoption of internal legislation and the conclusion of an international trade agreement are different ones, the conclusion of an IP agreement through the EC alone would lead to a circumvention of the constraints set by the EC Treaty for the adoption of internal legislation.¹¹

Both the application of the WTO dispute settlement procedure to IP and the European debate on the competence to conclude TRIPS highlight that this agreement, by introducing higher standards of IP protection that also apply to purely internal cases that do not directly relate to cross-border trade in goods and services,

⁷ A recent example of this is the authorization granted to Antigua and Barbuda on 28 January 2013 to suspend IPRs of US citizens for sanctioning a violation of commitments the US has made in the framework of GATS regarding gambling and betting. See United States – Measures Affecting the Cross Border Supply of Gambling and Betting Services, WT/DS285.

⁸ Opinion 1/94 [1994] ECR I-5267, para. 56. See also J. Drexl (1996), The TRIPs Agreement and the EC: What Comes Next After Joint Competence?, in F.-K. Beier & G. Schricker (Eds.), From GATT to TRIPs – The Agreement on Trade-Related Aspects of Intellectual Property Rights, p. 18.

⁹ Opinion 1/94 [1994] ECR I-5267, para. 57.

¹⁰ Ibid., para. 105.

¹¹ Ibid., para, 60.

has considerably extended the realm of what is regulated under international trade law. Due to this extension, national IP legislation that does not specifically relate to cross-border trade can become an object of WTO trade disputes for the sole reason that these rules, in certain instances, also apply to right holders who are nationals of other WTO Members.

2.2 The Economic Justification of the Concept of Trade-Relatedness of IPRs in 1994

The decision to integrate general IP legislation into the realm of international trade law in 1994 can be justified from an economic perspective. The reason why the US in particular pushed so hard for higher standards of IP protection has to be found in the large trade deficit from which the US suffered in the 1980s. The last year in which the US enjoyed a trade surplus was 1975. By 1987, the year after the launch of the GATT Uruguay Round, the US had reached a historic peak in trade deficits of US\$ 153.3 billion corresponding to about 3 % of its GDP. ¹²

In this situation, the US government was confronted with the fact that it had major problems competing especially with new emerging economies¹³ with regard to the sale of goods and services in the world market, although the US was undoubtedly the technologically leading nation. Hence, the US identified insufficient protection of IPRs in other countries as a major reason for its trade deficit. Other nations could sell their goods at much lower prices in world markets, although these goods would have to be considered as infringing goods if sold in the US.

There were three means of action that the US government took to react to this situation: first, there was a need to protect the US market better against imports of infringing goods. In this regard, Section 337 of the Tariff Act¹⁴ makes the infringement of statutory intellectual property rights under US law an unlawful practice and empowers the International Trade Commission (ITC) to impose an import ban on IP infringing imports on the initiative of the right holder. By making imported goods more expensive, such measures alleviate the problem of the trade deficit. Yet import bans only protect the national market and create an internal level playing field between domestic and imported goods. They do not have any effect on

¹² U.S. Department of State (2014), History of the U.S. Trade Deficit.

 $^{^{13}}$ At this time, the discussion focused on the so-called "four Asian tigers": South Korea, Taiwan, Hong Kong and Singapore.

¹⁴ 19 U.S.C. § 1337.

¹⁵ For further information see The U.S. International Trade Commission, Section 337 Investigations – Answers to Frequently Asked Questions, Publication No. 4105 of March 2009, pp. 25 et seq.

competition in foreign markets and, therefore, do not promote international competitiveness of goods made in the US.

This is why, as a second means, US trade law obligates the US Trade Representative (USTR) to report annually on the state of IP protection in other countries under the so-called Special 301 Amendment to Section 301 of the Trade Act of 1974. Where such a Special 301 Report identifies that

countries ... deny adequate and effective protection of intellectual property rights, or ... deny fair and equitable markets access to United States persons that rely upon intellectual property protection,

such a Report may give raise to a complaint pursuant to the dispute settlements rules of the relevant agreement or to any other adequate action to remedy the problem. With regard to the latter, Section 301 indeed empowers the US administration to take measures of unilateral retaliation against the identified, so-called "priority foreign countries", which typically consist in the withdrawal of trade preferences granted to such countries.

The US implemented the Special 301 Amendment at the beginning of the GATT Uruguay Round negotiations; the first Special 301 Report was published in 1989.

Finally, the third means consists in raising the level of IP protection through multilateral and bilateral trade agreements. This is the course the US began to pursue in the GATT Uruguay Round with the objective of implementing higher standards of IP protection that are respected globally. With regard to the level of IP protection that should be pursued in all trade negotiations, the Trade Promotion Authority Act of 2002, which nowadays guides US negotiations of trade agreements, is very explicit by obliging US negotiators to ensure that "the provisions of any multilateral or bilateral trade agreement governing intellectual property rights that is entered by the United States reflect a standard of protection similar to that found in the United States." ¹⁶

All three means employed by the US are trade-related. Taken together, they are designed to level the playing field for all producers of goods and providers of services in the domestic and foreign markets with regard to IP protection. Those trade measures are thereby expected to raise international competitiveness of US producers. At the same time, higher standards of IP protection will increase the flow of royalty payments of licensees abroad to US right holders.

2.3 The Political Strategy to Implement Trade-Related IP Rules in TRIPs

Prior to 1994, many, especially developing, Member States of the WIPO had indeed become very reluctant to agree on higher standards of protection. This was

¹⁶ Section 2102(b)(4)(A)(i)(II) of the Bipartisan Trade Promotion Authority Act of 2002.

especially the case in the field of industrial property in general and patent law in particular. The last revision of the Paris Convention dates back to 1967. Hence, it had become clear that those countries that were advocating higher standards were in need of a new strategy.¹⁷

The new strategy consisted in combining IP issues with trade negotiations. It was finally implemented in form of a "package approach" in the Uruguay Round negotiations. Countries that were advocating higher levels of IP protection made clear from the very beginning that they would not agree on trade liberalization without considerable concessions of other countries in view of higher standards of IP protection. Hence, trade preferences were now used as a bargaining chip for higher levels of IP protection.

Yet TRIPS did not meet all expectations of those industries and countries that were seeking more protection. This explains why, after the Doha Development Agenda of 2001 and the failure of the WTO Ministerial Conference in Cancún of 2003, developed nations turned away from TRIPS and started to pursue their "TRIPS-plus" agenda by negotiating even higher standards of IP protection as part of bilateral trade agreements. Yet, also in the framework of such bilateral negations, the package approach continued to be employed as a most powerful strategy.

2.4 The Concept of Trade-Relatedness as a One-Way Ticket Towards Expansion

According to the foregoing analysis the recognition of the trade-relatedness of substantive standards of IP protection seems almost unavoidable, very timely and powerful. Yet there is also another side to the coin. All three aspects of the trade-relatedness of IPRs push the international IP system towards expansion.

From a legal perspective, the existing system of IP conventions and treaties only allow the conclusion of new agreements if they provide for more protection. In such a system, the recognition of mandatory "ceilings", according to which states must not go beyond certain standards of protection, have hardly a chance of being accepted. ¹⁸ Adopting the same approach, TRIPs only grants certain flexibilities

¹⁷ For an early discussion of whether the GATT system is a suitable forum for breaking up the stalemate of the WIPO/Paris system see H. Ballreich (1989), Enthält das GATT den Weg aus dem Dilemma der steckengebliebenen PVÜ-Revision?, GRUR Int. 1989, 747.

¹⁸ Such a reform of TRIPS, based on the introduction of ceilings with a view to reaching a better balance, was nevertheless proposed by the Scandinavian "Intellectual Property in Transition Project". The text of the proposed amendments to TRIPS were published in A. Kur & M. Levin (2011), Intellectual Property in a Fair World Trade System – Proposals for Reform of TRIPS.

that authorize WTO Members to take account of conflicting concerns.¹⁹ Those flexibilities can be negotiated away in bilateral agreements.

From an economic perspective, the goal of levelling the playing field for firms in international markets would only have required harmonization of the standards of IP protection, but not necessarily continuously raising harmonized standards of such protection. Yet the justified economic rationale of relating IP rules with trade was met by the belief of the economic powerful nations that their trade interests, and those of their firms, would be promoted by an expansion of IP protection. Thereby, however, trade diplomats overlooked that IP systems rely on a balancing of a multitude of conflicting interests that are not, or not sufficiently, taken account of in international trade negotiations.

And finally the package approach provides trade negotiators with a powerful tool that guarantees success. Such successes of the trade negotiators of developed nations are measured by the concessions that are made by the other contracting parties with regard to higher standards of protection.

In sum, the analysis shows that the concept of the trade-relatedness of IPRs is not just a label put on TRIPS to formally justify the inclusion IP rules in international trade law. The concept appears as a one-way ticket that WTO Members have taken for a journey towards IP expansion.

3 The Concept of Trade-Relatedness in the Bilateral World

In the foregoing analysis, it has already been pointed out that the trend toward bilateral trade agreements with IP provisions, which we have been witnessing for the last decade, has been promoted by the concept of trade-relatedness of IPRs. In the following, the analysis will explain how the WTO/TRIPS system itself favoured that development and what kind of results this trend has produced so far.

3.1 Legal Features of the WTO/TRIPS System That Favour IP Bilateralism

From a legal perspective, there are several elements built into the WTO/TRIPS legal system that do not only allow for transferring the concept of trade-relatedness of IPRs to bilateral trade agreements, but even promote it.

¹⁹ In more detail see H. Grosse Ruse-Khan (2008), A Comparative Analysis of Policy Space in WTO Law, Max Planck Institute for Intellectual Property, Competition & Tax Law Research Paper Series No 08-02. More recently, under the leadership of the Max Planck Institute for Innovation and Competition, a declaration on a more flexible interpretation of the patent provisions of TRIPS was published. See M. Lamping et al. (2014), Declaration on Patent Protection – Regulatory Sovereignty under TRIPS, 45 IIC 2014, 679.

First, TRIPS follows the example of the WIPO Conventions in defining its relationship with later agreements concluded outside the WTO. Article 1:1 TRIPS provides that WTO Members may implement more extensive protection. This does not only relate to the authority of WTO Members to recognize autonomously higher standards of protection in their domestic legislation, but also includes the possibility to enter into agreements with internationally binding obligations to introduce TRIPS-plus standards. This interpretation of Article 1:1 TRIPS is also confirmed by the most-favoured-nation clause of Article 4 TRIPS according to which any advantage granted to nationals of the another country has to be accorded immediately and unconditionally to the nationals of all other WTO Members.

Second, the transfer of the concept of trade-relatedness of IPRs to bilateral agreements would not work if the WTO system prevented WTO Members from using trade concessions as a bargaining chip for higher IP standards. This, however, is not the case. According to XXIV:5 GATT, WTO Members are allowed to enter inter free trade agreements. Trade concessions made in the framework of free trade agreements—most importantly including the abolition of all customs duties for certain products originating from the other country—are exempted from the application of the most-favoured-nation (MFN) obligation under Article I GATT. Thus, WTO Members can offer trade concessions to individual countries in the framework of such free trade agreements without having to grant the same form of free trade to other WTO Members.

Third, the non-discrimination obligations of TRIPS, namely national treatment (Article 3 TRIPS) and MFN treatment (Article 4 TRIPS), still apply. To the extent that countries have to change their national law under the IP obligations of bilateral agreements, nationals of other WTO Members will benefit from such higher standards based on national treatment as from the implementation of the agreements in national law. The most-favoured national obligation might click in even before, based on the mere conclusion of the bilateral agreement. In sum, the non-discrimination clauses of TRIPS "multilateralize" IP concessions made in bilateral agreements. They thereby indirectly become part of the legal system of the WTO. Other WTO Members can bring complaints under the WTO Dispute Settlement Understanding based on the TRIPS non-discrimination clauses for non-respect of TRIPS-plus obligations contained in free trade agreements although they do not belong to the contracting parties of such agreements.

Beyond these legal implications of this regime, its economic effects are also substantial. The fact that free trade concessions are exempted under Article XXIV:5

²⁰ Article 4 TRIPS is not clear with regard to whether mere obligations arising from international agreements can be considered an "advantage, favour, privilege or immunity" granted to the national of another country. If one required recognition of such rights under domestic law, Article 4 TRIPS would hardly have any scope of application in addition to Article 3 TRIPS.

GATT conflicts with the economic justification of the trade-relatedness of IPRs.²¹ Whereas this justification for linking IP with trade lies in the objective of levelling the playing field of international trade with regard to IP, the recognition of trade preferences in bilateral trade relations undermines this very objective of levelling the playing field for firms in foreign markets.

Moreover, while IP concessions are permanent, the competitive advantage from free trade accruing for the country that has agreed on higher IP standards will progressively be eroded if subsequently the other party enters into similar agreements with other countries. Countries need to be aware of this phenomenon of "preference erosion" when they accept higher IP standards as part of free trade agreements. ²²

3.2 Additional Problematic Features of IP Bilateralism

It is not the place here to discuss individual TRIPS-plus provisions in bilateral trade agreements. However, there are a series of general features that distinguish the bilateral trade-related IP rules from the multilateral ones and make IP bilateralism particularly problematic.

As indicated above with regard to the US Bipartisan Trade Promotion Authority Act of 2002, developed countries tend to take their own national IP legislation as a blueprint for the provisions they aim to impose on their trading partners in the framework of bilateral trade agreements. Such an approach would not be possible in a multilateral forum such as that of TRIPS, where developed nations also often have to compromise on the approach to certain IP rights. This particular feature of IP bilateralism that allows for exporting national IP concepts may even be an important additional argument for trading nations to prefer bilateral trade negotiations to multilateral ones. The most striking case of this phenomenon is presented by the provisions on geographical indications (GIs) in the bilateral trade agreements of the US and the EU. While the US gives precedence to trademark protection, the EU tries to export its very specific concept of GIs to developing countries in its trade agreements. GIs are also interesting because the US and the EU were not able to compromise on a uniform global approach to GIs during the TRIPS negotiations. Hence, bilateralism in some instances is not only a mechanism that is used to

²¹ On the general distortive effects of such preferential trade agreements see J. Bum Kim (2014), Entrenchment of Regionalism: WTO Legality of MFN Clauses in Preferential Trade Agreements for Goods and Services, 13 World Trade Rev. 2014, 443.

²² This is also recommended by H. Grosse Ruse-Khan et al. (2013), Principles for Intellectual Property Provisions in Bilateral and Regional Agreements, 44 IIC 2013, 878, para. 19.

²³ On the EU policy see, for instance, F.M. Abbott (2014), Trade Costs and Shadow Benefits: EU Economic Partnership Agreements as Models for Progressive Development of International IP Law, in J. Drexl, H. Grosse Ruse-Khan & S. Nadde-Phlix (Eds.), EU Bilateral Trade Agreements and Intellectual Property: For Better or Worse?, pp. 159, 165 et seq.

impose higher standards of IP protection on "unwilling" developing countries, but also a tool used by some developed countries to make their own domestic IP concepts the internationally dominant concept in competition with other developed countries. This feature of bilateralism produces worst results if developing countries enter into agreements that contain mutually exclusive approaches to certain IP systems. An example of this is provided by the Dominican Republic which is bound by a Free Trade Agreement with the United States and the Economic Partnership Agreement it has concluded as a CARIFORUM country with the EU. The two agreements contain conflicting rules on GIs. Another example of a specific legal transplant is provided by the US practice to include the transferability of copyright into bilateral trade agreements. Such a rule is not only in the economic interest of the US copyright industry, it also conflicts with the tradition of some continental European countries, following the monist approach, where the copyright as such cannot be transferred.

In other areas, the goals pursued by developed countries may be very similar when they make TRIPS-plus standards part of their bilateral agreements. An example of this is provided by the provisions on test data exclusivity which can be found in the agreements of the US, the EU, the EFTA and Japan. Still the concrete requirements differ quite considerably. This is mostly due to the fact that countries that have test data exclusivity and want to promote this form of protection through bilateral trade agreements have not at all harmonized their laws. Hence each of these countries tries to promote its own domestic concept. This leads to considerable legal uncertainty as to what kind of protection can be claimed under the MFN obligation of Article 4 TRIPS in case an individual country has entered into several bilateral trade agreements that contain diverging rules on test data exclusivity. This example shows how IP bilateralism reduces coherence and transparency in the international IP system.

In such instances in which individual countries are already bound by bilateral TRIPS-plus standards and, consequently, where other developed countries can already rely on such concessions based on TRIPS national and most-favoured-nation treatment, coherency of the system could in principle be promoted if other countries simply refrained from spreading yet another layer of obligations on the already existing one. Yet, quite on the contrary, developed countries act as if they ignored already existing TRIPS-plus obligations and the effect of the non-discrimination principles of TRIPS. It rather seems that countries tend to mimic the approach of other trading nations to conclude bilateral agreements with exactly the same countries and try to impose their own domestic concepts on top of the already existing obligations. This seems to happen without even asking whether such agreements will provide for any additional protection, whether it is economically worthwhile to negotiate such obligations and whether the other party will be able to implement potentially conflicting standards.

Yet developed countries do not necessarily insist on having the same rules in all of their bilateral agreements. In some instances, such differences may be explained by the different level of development of the other parties that are taken into account by the developed country. For instance, in the Economic Partnership Agreement

with CARIFORUM, the EU has refrained from including provisions on test data exclusivity. The EU even seems to have given up its idea to include any IP provisions in the Economic Partnership Agreements with the African and Pacific countries of the APC group. In other cases, differences may prove that the developing countries indeed have some chances to reach compromises during the negotiations. Yet, in other instances, differences appear almost irrational and coincidental. For example, when the EU negotiated the Association Agreement with Central America and the Trade Agreement with Columbia and Peru at more or less the same time, the EU was pushing for criminal sanctions for the infringement of all IPRs, including patents, in Central America while it did not make any claims in this regard in its negotiations with Columbia and Peru. 24 One wonders about the causes of such different approaches. One possible explanation relates to the imperfections of the procedures for setting the negotiation agenda that do not contain any mechanism for detecting such inconsistencies. As regards the US, it seems more important at what time the negotiation agenda is fixed and the agreement gets the approval from the Senate. The openness of the US government and the US Senate to taking account of the special needs of developing countries seems more strongly influenced by political changes than in the EU. This makes it especially troublesome if certain countries are bound by more severe obligations only because they had to deal with a less conciliatory US administration or Senate.

Finally, also the selection of the countries with which developed trading nations agree on TRIPS-plus standards in bilateral agreements is rather coincidental. Only some geographical focus can be identified. For instance, the US concentrates on the Americas and the Pacific Rim, Japan on Asian countries, and the European Union takes account of the needs of the ACP countries as former European colonies. Conversely, countries that are not economically integrated in regional organisations are more willing to conclude free trade agreements—and often with a considerable number of other trading partners. Examples of this are Chile and South Korea. Yet, in many instances, bilateral trade agreements are concluded with other countries at times when these countries have governments that are politically more open to compromise and to pushing through such agreements even against opposition in the national parliaments and resistance of the public. For instance, Australia concluded its free trade agreement with the US despite considerable public opposition when it had a very pro-US government. Even more extreme cases are agreements with smaller countries, the economic benefits of which hardly seem to justify the effort of negotiating them. Examples of such agreements are the two Free Trade Agreements of the US with Bahrain and Oman.

²⁴ On this see J. Drexl (2014), Intellectual Property and Implementation of Recent Bilateral Trade Agreements in the EU, in J. Drexl, H. Grosse Ruse-Khan & S. Nadde-Phlix (Eds.), EU Bilateral Trade Agreements and Intellectual Property: For Better or Worse?, pp. 265, 272 et seq. The final text of the Association Agreement with Central America (Article 271) only points out that the parties "may" provide for criminal sanctions for IP infringement.

3.3 TRIPS-Plus Provisions in WTO Accession Agreements

IP multilateralism and IP bilateralism intersect in a very peculiar way in the framework of negotiations on the accession of countries to the WTO. According to Article XII:2 WTO Agreement, countries can accede to the WTO based on an accession agreement, which needs to be supported by two thirds of the existing WTO Members at the Ministerial Conference. These procedural requirements seem to provide quite some leverage to individual WTO Members to impose on countries that want to join the WTO TRIPS-plus commitments in their accession agreements. Such results seem to be promoted by the practice that accession is negotiated bilaterally with individual WTO Members that may formulate their individual claims for TRIPS-plus standards. This phenomenon seems rather astonishing since it appears as part of the very idea of multilateralism that new WTO Members should only be obliged to comply with the existing WTO rules. Yet some research shows that acceding developing countries were regularly confronted with claims to introduce TRIPS-plus standards, including test data exclusivity, although those claims did not necessarily make it to the binding Conclusions. 25 Most striking is certainly the fact that least-developed countries are not automatically granted the transition periods enjoyed by the original WTO Members. For instance, when Cambodia as a least-developed country joined the WTO in 2004, it committed to fully implementing TRIPs by 2007.²⁶

3.4 The "Country-Club Approach" of Like-Minded Nations as a Next Step

The inclusion of TRIPS-plus provisions in bilateral trade agreements is not the last step in the development of the trade-relatedness of IP rules. With the initiative to conclude an Anti-Counterfeiting Trade Agreement (ACTA), the concept of trade-relatedness appeared again in a very different kind of agreement.

ACTA is very peculiar in several regards. This agreement is multilateral to the extent that it is open to accession by other countries.²⁷ But it is still different from other multilateral IP agreements to the extent that it was conceived as an agreement between like-minded nations.

²⁵ According to C. Deere (2009), The Implementation Game: The TRIPS Agreement and the Global Politics of Intellectual Property Reform in Developing Countries, pp. 155 et seq., all 12 developing countries that acceded to the WTO made some TRIPS-plus commitments.

²⁶ Ibid., p. 156.

²⁷ Article 43(1) ACTA empowers every WTO Member to apply for accession. According to Article 43(2) ACTA, the Committee decides on the term of accession for each applicant.

Indeed, the negotiating parties considered themselves as kind of a "country club". The objective of their negotiations was not to find a compromise between themselves and the different interests they have. Rather, they share the same interests and try to pursue these interests through concerted action with regard to third parties. Hence, ACTA has the objective to raise the standards of IP enforcement not specifically in the legal system of the contracting parties, although they create binding obligations between the parties, but tries to set a "gold standard" of enforcement that could later be implemented in bilateral and other trade agreements with other trading partners. ²⁹

After the vote of the European Parliament against ACTA on 4 July 2012, no other signatory has ratified the Agreement. It is therefore quite likely that ACTA will never enter into force. What interests here, however, is that ACTA stands for a change in the concept of trade-relatedness of IP provisions. Indeed, one wonders why this agreement is called a Trade Agreement in the first place. Its application is not limited to specific situations of cross-border trade, but fixes general standards of IP enforcement. In this regard, it follows the approach of the enforcement chapter of TRIPS. But it is different from TRIPS to the extent that it cannot be justified by creating a level playing field in international trade—rather the parties continuously maintained that ACTA would not require any changes in their national laws—and is not strategically built into a package approach. Yet the objective of concluding this agreement is still related to trade. ACTA adopts a "prospective" trade approach by harmonizing the national law of the participating countries according to this gold standard as a platform for future trade negotiations with outsiders.

By initiating ACTA, developing countries were not aware that substantially the same approach of acting in a concerted manner can also be applied by the "club of the unwilling". Indeed, there is the possibility for countries which want to resist claims for ever higher IP standards to enter into "defensive agreements" that make the introduction of TRIPS-standards a violation of international law or fix other levels of maximum protection.

3.5 The Trade-Relatedness of IPRs in 2014

The preceding analysis shows that the trend towards the inclusion of TRIPS-plus standards challenges the concept of the trade-relatedness of IPRs as it developed 20 years ago at the conclusion of the WTO/TRIPS Agreement. But, still, this concept appears very robust.

²⁸ See, for instance, P.K. Yu (2011), ACTA and Its Complex Politics, 3 WIPO J. 2011, 1.

²⁹ See H. Grosse Ruse-Khan (2012), From TRIPS to ACTA: Towards a New 'Gold Standard' in Criminal IP Enforcement, in Ch. Geiger (Ed.), Criminal Enforcement of Intellectual Property: A Blessing or a Curse?, p. 171.

IP bilateralism challenges the economic justification for including IP rules in trade agreements by making the international IP system less coherent and transparent. As a consequence of the trade concessions, IP bilateralism undermines the role of higher standards of protection with a view to levelling the playing field in international trade with regard to IP. Yet, despite these concerns, the link between IP and international trade law is even more promoted by bilateralism as a continuation of the political strategy to use trade concessions as a bargaining chip for higher standards of IP protection. Also, this political strategy is not only accepted, but even promoted by the legal design of the multilateral WTO trading system. The new country club approach of ACTA goes beyond the previous concept of traderelatedness. However, it does not contradict the linkage between IP law and international trade law. It rather drives the concept of the trade-relatedness of IPRs a step further so to include rules that are concluded among like-minded nations as a means to coordinate IP standards that are designed to enter in later bilateral trade negotiations with countries that do not share the same interests.

Most importantly, the concept of the trade-relatedness remains most robust in the perception of those countries that continue to strive for ever-higher standards of IP protection. Despite fundamental technological and economic changes that characterize, and contribute to, the phenomenon of economic globalization, political decision-makers in the developed countries still believe that an expansion of IP protection is in the best interest of at least their own national economies. Whether this is correct still needs to be tested in the following in the light of economic considerations.

4 An Economic Assessment of the Concept of the Trade-Relatedness of IP Rules from Today's Perspective

For assessing whether the concept of the trade-relatedness of IP rules as it was developed 20 years ago can still be economically justified today, the following analysis relies on considerations deriving from five different forms of economic analysis, namely: (1) the economics of intellectual property, (2) the economics of international trade, (3) the economics of competition, (4) development economics, and finally, (5) institutional economics.

4.1 The Economics of Intellectual Property

The economics of intellectual property has to be the starting point of the economic evaluation of the concept of trade-relatedness in today's globalized world. The fundamentals of the economics of IP are well known and can be summarized here with regard to the international dimension. This will be done for the two classical

economic theories important for IP, namely the public goods theory and the property rights theory.

According to the public goods theory, IP protection is needed in order to create incentives for investment in innovation and creativity. In the international context, one has to note in particular that the subject matter of protection of IP is characterized by its ubiquitous nature. Once it is produced, it is potentially available to the whole world. Yet, the public goods theory does not require that all countries of the world provide protection or that protection is equally strong in all countries. For creating sufficient protection for the investment, it suffices that there is adequate protection in some countries. This is also proven by the practice of patent law in particular. Even if inventors want to exploit their inventions globally, they do not apply for patents in all jurisdictions. They will especially refrain from doing so, if the costs of patenting are not outweighed by the benefits patent exclusivity in the given jurisdiction provides to the inventor.

The public goods theory can explain that protection is needed in principle. But this theory cannot explain how the scope of protection of a particular IPR should be defined. This more complex issue is addressed by the property rights theory. According to this theory, rights should be designed with a view to maximizing efficiency. In this regard, the legislature has to take account of the ambivalent character of IPRs. They create benefits to society with regard to incentives for innovation and creativity. But they also generate costs by excluding members of society from access or by simply making users pay more for access. Hence, the scope of IPRs has to be defined in view of achieving an efficiency trade-off. Thereby, the legislature has to strike a balance between exclusivity and access.³⁰ From an international perspective, the property rights theory faces additional challenges in two regards. On the one hand, in a world of national legislation, countries are right in defining their trade-offs individually. IP laws that produce an efficient outcome in some countries can be inappropriate for other countries. Hence, the public goods theory argues for an international IP system that takes account of the need of such flexibilities for national legislation. On the other hand, it is legitimate to claim that the international IP system should not only promote the most efficient trade-off of IP for individual countries. If this were the case, no international IP rules should be adopted in the first place. International IP rules should above all strive to achieve an "international" efficiency trade-off. The international trade-off deviates from the national trade-off. In some instances, the national trade-off of some countries will argue for lower standards of protection than required by the international standard if these countries have to take account of the particular need of their users in having easier access to the subject matter of protection. Fixing the international IP standard at the international trade-off has the objective of excluding the free-riding of users in countries with lower trade-offs on

³⁰ Striking a balance between the two is identified as the "traditional challenge" of any IP policy by M. Perez Pugatch (2011), Intellectual Property Policy Making in the 21st Century, 3 WIPO J. 2011, 71.

the investment in innovation and creativity in other countries. Conversely, for other countries the national trade-off as regards the level of IP protection may exceed the international trade-off. In this regard, by allowing the deviation as part of the principle of minimum protection, international IP law allows for such deviation from the international trade-off.

Both the public goods theory and the property rights theory fail to provide guidance as to how concrete IP rules should be designed. Yet they are helpful in shaping the way we think in the field of IP policies. In this regard, these theories provide insights for the evaluation of the concept of trade-relatedness of IPRs.

Two conclusions can be drawn in this regard. First, by using trade concessions to leverage IP protection, namely in the framework of TRIPS, and with regard to individual other countries in the framework of bilateral trade agreements, the system necessarily moves towards inefficient over-protection by exporting the national trade-off of the economically powerful states to other countries. This was already a problem in the framework of the TRIPS negotiations when the developed countries tried to impose their IP concepts on the rest of the world. But in the framework of the multilateral negotiations, these countries had to compromise and take into account the need for flexibilities of other countries. In the framework of bilateral agreements such institutional safeguards for a more balanced outcome are no longer present and, if the IP-interested country only pursues its economic interests, it will impose its national IP trade-off, which exceeds the international trade-off, on the economically weaker party.

Second, in the trade-related context, the issue is not only about the international IP trade-off. Even if the political strategy of leveraging IP protection by using trade concessions as a bargaining chip leads to inefficient IP over-protection, this may not cause any economic harm to the weaker parties of such trade agreements as long as the economic disadvantages of stronger IP standards are outweighed by the trade benefits. Hence, with regard to the concept of the trade-relatedness of IPRs, one also has to take account of the particular trade-off between higher standards of IP protection and trade benefits. This is where our attention necessarily has to turn to the economics of international trade.

4.2 The Economics of International Trade

The international trading system, as it has developed with the conclusion of GATT in 1947, builds on the general economic theory of the welfare enhancing effects of international trade. Still today, this goes back to David Ricardo's theory of comparative advantage according to which nations should abstain from trying to be economically self-sufficient, but should specialize in the production of those goods and services for which they are economically most competitive.

It is not possible to discuss the limitations of this theory at length here. Yet they do matter in particular for IP. Ricardo's theory can be characterized as a static theory in the sense that it only takes account of what nations are best at, at one point in time. If, however, nations want to develop their skills through technology

transfer in particular they have to make an investment in the future.³¹ Hence, Ricardo's static theory may only produce short-term efficient outcomes, but may fail to be efficient in the long run.

Yet Ricardo provides correct advice to the extent that his theory argues against protectionism. His theory explains that nations will benefit from imports of goods and services if these goods and services can be produced more efficiently abroad. Hence, all nations have a strong self-interest in free trade. Yet in a system of sovereign states, such states will not necessarily open their borders to cheap imports from abroad. Rather, there is a risk that some nations will try to free-ride on the free trade policies of other nations by benefitting from freely exporting their goods and services to the open market economies and restricting imports from there in order to protect their own inefficient producers. Hence, without international agreements on free trade, the international trading system would necessarily tend towards inefficient protectionism.

The trading system of the WTO builds on these ideas by making the idea of mutual concessions a fundamental principle of the multilateral trading system. In this regard the preamble of the WTO Agreement provides that the parties to the agreement contribute to the economic welfare goals as set out by the preamble "by entering into reciprocal and mutually advantageous arrangements".³²

With regard to the trade-related aspects of IPRs the problem arises that the costs and benefits of higher standards of IP protection are extremely difficult to gauge, whereas, due to their static nature, this is much easier with regard to free trade, which is typically expressed by a reduction of customs duties and the corresponding increase in cross-border sales. In addition, benefits in terms of trade liberalization are typically of a short-term nature, whereas the social costs of excessive IP protection will often materialize only in the long run. Both of these aspects create a risk that countries that "import" a standard of IP protection that exceeds standards that would correspond to their national efficiency trade-off, will err in making a sound assessment of the IP-trade efficiency trade-off and agree too easily to trading excessive IP standards in order to gain trade benefits.

Things are made worse by the problem of preference erosion, which has been described above.³³

4.3 The Economics of Competition

In the light of the economic justification of the trade-relatedness of IPRs, it is also important to take account of the economics of competition, since the major argument in favour of including IP rules in international trade agreements is to level the

³¹ See H.-J. Chang (2007), Bad Samaritans: The Myth of Free Trade and the Secret History of Captialism, pp. 30 et seq.

³² This formula has been adopted from the Preamble of GATT 1947.

³³ See supra fn. 22.

playing field of competition across borders with regard to such rules. Trade-related IP rules pursue an increase in the competitiveness of countries and firms producing in such countries that have higher standards of IP protection than others.

Indeed the competition argument in the framework of trade can be related to both countries when they act within the framework of international trade negotiations, and individual firms when they engage in cross-border business activities.

As regards competition between countries, trade concessions in bilateral trade negotiations work as a powerful tool for getting higher standards of IP protection implemented in other countries. The economies of developing countries are much less diversified than those of developed countries; often, this is a legacy of the colonial era. Therefore, many developing countries depend on market access for very few products in the developed countries. Free trade agreements will provide them with a competitive advantage over other production countries. This competitive advantage will be larger if developing countries manage to precede other competing countries in concluding bilateral trade agreements. Hence, international competition among countries creates an additional incentive for developing countries to trade higher IP standards for trade concessions.

The economics of competition, however, focuses on competition between firms. Competition policy analysis in the context of IPRs is particularly complex. Following the modern view according to which IP and competition law pursue complementary goals in the sense of promoting innovation and dynamic competition for better products and processes, competition analysis in the field has to take account of both the static effects on the price of products and the dynamic effects on innovation and creativity.

In principle, competition policy acknowledges the positive effect of IPRs on competition in terms of creating incentives for investment in innovation. With IPRs in place, firms are more likely to compete not only by price but also by offering better products to consumers. Higher standards of IP protection may produce more incentives for investment in innovation. This effect also needs to be noted in the framework of international trade. Higher standards of IP protection in developing countries have the potential of promoting foreign direct investment (FDI) by foreign right holders and transfer of technology. Only with domestic IP protection in place, will foreign right holders transfer their technology to domestic licensees.³⁴

But the pro-competitive effects of IP protection do not necessarily require uniform global IP standards. A major argument against this need derives from the fact that the international trading system and TRIPS in particular do not require

³⁴ In general, on the nonetheless complex economic relationship between IP protection and transfer of technology see R. Falvey & N. Foster (2006), The Role of Intellectual Property Rights in Technology Transfer and Economic Growth: Theory and Evidence; K.E. Maskus (1997), The Role of Intellectual Property Rights in Encouraging Foreign Direct Investment and Technology Transfer. Most importantly, the likelihood of a positive effect of higher IP standards on transfer of technology will depend on already existing imitative capacity of a country. Hence, emerging economies such as China are much more likely to benefit from IP protection than least-developed countries. See A. Breitwieser & N. Foster (2012), Intellectual Property Rights, Innovation and Technology Transfer: A Survey, p. 56.

states to introduce a principle of international exhaustion. Indeed, in particular with regard to patent law, the developed, technologically advanced countries refrain from accepting international exhaustion. This allows right holders to control the flow of cross-border trade in the direction of the more prosperous markets and, consequently, to price-discriminate between richer and poorer countries. In this world, IP-related markets therefore remain largely domestic. In a world with largely separated national markets, a level playing field of competition only requires uniform application of IP law within these national markets and not internationally harmonized IP standards across borders.

The denial of international exhaustion by richer, IP-interested countries has positive as well as potentially negative effects on developing countries. In general, the ability to price-discriminate serves the interest of poorer consumers in the developing countries. Right-holders can take lower buyer power in these countries into account and serve these markets better at lower prices without fearing that their products will be traded to the richer countries. On the other hand, the denial of international exhaustion has the potential of harming the export interests of especially emerging economies that have developed as important production countries and from where licensees cannot directly serve the markets of richer countries without the consent of the right holder. Also this latter effect shows that trading higher IP standards with trade concessions especially in the framework of bilateral trade agreements creates some imbalance. While developing countries import high standards of IP protection, they are not free to export products that are produced on the basis of such standards freely to those countries that have pushed for such standards.

4.4 Development Economics

Another economic aspect that needs to be taken into account is the effect of including IP rules in trade agreements of developing countries on the interest in sustainable development. This aspect is particularly close to the economics of IP since both aspects are not static in nature but refer to the long-term development of economies. Yet the interest in sustainable development and development economics as its theoretical basis go beyond what has already been discussed in the context of IP and dynamic competition. The reason for this is that the interest in sustainable development certainly includes the interest in "technological" development, but also advocates taking into account the larger societal context of development.³⁵

³⁵ This is, of course, where the international human rights debate has to be located. This very intensive and on-going debate cannot be deepened here. See only, with particular importance for the focus of this chapter, D. Matthews (2011), When Framing Meets Law: Using Human Rights as a Practical Instrument to Facilitate Access to Medicines in Developing Countries, 3 WIPO J. 2011, 113; P.K. Yu (2012), Intellectual Property and Human Rights in the Nonmultilateral Era, 64 Fla. L. Rev. 2012, 1045.

With regard to the aspect of technological development and transfer of technology, which has already been addressed to some extent, it should be pointed out that higher standards of IP protection are certainly conducive to more FDI and transfer of technology. Yet this does not answer the question of whether developing countries will make significant welfare gains in terms of more FDI and technology transfer when they accept TRIPS-plus standards. If we take into account that those countries are already bound by TRIPS, the additional benefits can be expected to be rather marginal.

In contrast to those relatively limited benefits in terms of technological development, development economics highlights in particular the social costs of more advanced IP standards. In this regard, it has to be emphasized that the same IP rules may involve much higher social costs in developing countries than in developed countries. This is especially so with regard to IPRs that restrict access to essential goods such as pharmaceuticals, food and education. While, for instance, the recognition of test data exclusivity concerning pharmaceuticals in developed nations will certainly make drugs more expensive and create budgetary constraints for the social security systems, the same rules can even exclude patients from access to the same drugs in developing countries where social systems for health care are poorly developed or even non-existent. This problem is only mitigated by the rejection of international exhaustion in the developed countries, which allows for price discrimination and lower prices in developing countries.

4.5 Institutional Economics

The analysis would remain incomplete without presenting some more considerations from the perspective of institutional economics. In this regard, public choice theory, which analyses the political process from an economic perspective, is most important. The question is whether the political process for creating trade-related IP rules in the framework of the making of international trade agreements leads to efficient rules.

The results of this analysis are particularly worrisome. From the perspective of public choice theory, the problem is that the different stakeholders in IP are not equally able to express their respective interests. Right holders dispose of targeted economic interests; they are extremely well organized, often represent major domestic firms and have direct access to the governments. In contrast, the interests of the users and consumers affected by excessive IP protection are diffuse and largely relate to general public interests such as public health, food security, free speech, etc. In such a system, even in a purely national context, IP law easily becomes the domain of intensive rent-seeking of right holders who can hope to draw major benefits from increased protection.

Such rent-seeking may be much more successful if it relates to international standards of IP. The negotiation agendas are exclusively set by the governments, and the diplomatic process as such enables the negotiators to control the flow of

information to the public. Democratic control is practically non-existent until the point in time when the results of the negotiations are put on the table of parliaments in the form of a new agreement that the governments want to be ratified.

Even if the members of parliament understand the full social implications of the agreement, the situation in which they have to make their decision is substantially different from adopting autonomous IP legislation. Even more than their governments, national parliaments are confronted with the political strategy of the package approach that does not allow for an unbundling of the different topics covered by comprehensive free trade agreements. The question before the parliaments is not how to balance most appropriately the conflicting interests of different stakeholders in the framework of national IP legislation, but how to assess and balance the social costs and benefits of such agreements. While the governments at least have a chance to influence the outcome of the negotiations of bilateral trade agreements, the parliaments can only give the approval to an agreement in its entirety or reject it.

This political economy makes international trade law most attractive for rentseeking by strong right holders in the industry. International trade law not only helps such right holders prevail with their interests over conflicting public interest concerns and the conflicting interests of the users, but international IP standards are also more powerful than national legislation. While it seems that developed countries only aim to export their own national IP laws to other countries in the framework of bilateral trade agreements, which should not require any implementation in the legal systems of the developed countries, there are examples where developed countries have pushed for IP rules that are not even part of their own national system. For instance, the Free Trade Agreement between the EU and South Korea contains rules on criminal sanctions that go beyond those already contained in TRIPS by also requiring criminal liability of legal persons and for aiding and abetting.³⁶ Those rules are highly problematic from an EU perspective since the European Parliament has so far resisted to the Commission's initiative to adopt a Directive on criminal sanctions.³⁷ Such "EU-plus" provisions in bilateral agreements can later be relied upon not only by the other contracting party of the agreement but also the Commission itself who could claim before the European

³⁶ See Free Trade Agreement between the European Union and its Member States, of the one part, and the Republic of Korea, of the other part, [2011] OJ L 127/6.

³⁷ See Amended Proposal of the Commission of 26 April 2006 for a Directive of the European Parliament and of the Council on Criminal Measures aimed at ensuring the Enforcement of Intellectual Property Rights, COM (2006) 168 final. For critical comments on this Proposal see R. Hilty et al. (2006), Statement of the Max Planck Institute for Intellectual Property, Competition and Tax Law on the Proposal for a Directive of the European Parliament and of the Council on Criminal Measures aimed at ensuring the enforcement of intellectual property rights, 37 IIC 2006, 970. See also J. Griffith (2012), Criminal Liability for Intellectual Property Infringement in Europe: The Role of Fundamental Rights, in Ch. Geiger (Ed.), Criminal Enforcement of Intellectual Property: A Blessing or a Curse, p. 191.

Parliament that such rules need to be implemented in internal legislation in order to bring this legislation into conformity with the EU's international obligations.³⁸

The example of the EU-South Korea FTA highlights another problem of the political economy. Bilateral agreements with individual countries may raise less public awareness than other agreements. In rejecting ACTA, the European Parliament largely reacted to intensive public opposition and even demonstrations against this agreement. Yet the same kind of provisions may easily be implemented in any bilateral agreement with an ostensibly less important country. Given the relatively high number of bilateral agreements and their technical complexities, it cannot be expected that the public will always mobilize and that the European Parliament will always refuse to give its approval when the same issues are dealt with again in new bilateral agreements.

Finally, even the enactment of existing domestic standards of IP protection has advantages for right holders with regard to the legal situation in developed countries. Even in the developed country that has demanded the inclusion of certain IP standards in international trade agreements, the corresponding domestic rules cannot be repealed by domestic legislation without violating international law.

5 The Concept of the Trade-Relatedness of IRPs: Where Are We Today?

At the final stage of the analysis the preceding economic analysis allows us to assess where we are today with the concept of the trade-relatedness of IPRs against the backdrop of a fundamentally different world economy. Again, the analysis will distinguish between trade-relatedness as a legal concept, its economic justification and its use as part of a political strategy.

5.1 The Trade-Relatedness of IPRs as a Legal Concept

First, concerning international law, changes have occurred in two regards. One change is of a quantitative nature. IP-rules have entered into numerous bilateral free trade agreements. The other change is of a qualitative nature. It mostly relates to the country club approach of agreeing on international IP rules as a standard for trade-related IP rules as part of agreements where these rules are traded against trade concessions.

³⁸ On this case see also J. Drexl (2014), Intellectual Property and Implementation of Recent Bilateral Trade Agreements in the EU, in J. Drexl, H. Grosse Ruse-Khan & S. Nadde-Phlix (Eds.), EU Bilateral Trade Agreements and Intellectual Property: For Better or Worse?, pp. 265, 271–73.

Another change that deserves to be mentioned has occurred on the EU level. Indeed, in Opinion 1/94, the ECJ reacted to the institutional shortcomings and, in particular, the insufficient democratic control over the conclusion of trade agreements, when the court rejected exclusive competence of the EC for TRIPS in its entirety. After the establishment of the WTO, the provisions regulating the exclusive competence for commercial policy have been reformulated and extended several times. With the entry into force of the Lisbon Treaty on 1 December 2009, Article 207(1) of the Treaty on the Functioning of the EU (TFEU) now provides for exclusive competence for the "commercial aspects of intellectual property".

In this context, of course, the question had to arise whether the EU can make full use of international trade policy for defining the standard of internal EU law. This question is to be answered in the affirmative. In the more recent *Daiichi Sankyo* judgment, the Court of Justice of the EU (CJEU) indeed accepted full exclusive competence of the EU for TRIPS.³⁹ Still, the Court required a "specific link" of the IP rules with international trade, ⁴⁰ but held that such a link exists with regard to TRIPS in general as an integral part of the WTO system.⁴¹ The Court confirmed this rather formal view by the substantive argument that the WTO Dispute Settlement Procedure allows for cross-suspension of concessions between TRIPS and the other WTO Agreements.⁴²

In the light of Opinion 1/94, it is of particular interest that the Court did not reach a different conclusion despite the fact that the EU legislature had not yet regulated the issues before the referring court that arise from Article 27 TRIPS in respect of the availability of patent protection for pharmaceuticals. In Daiichi Sankyo, the Court fully accepted the binding international law effect of Article 27 TRIPS on the European legislature. According to the Court, the European legislature, acting by virtue of the provisions relating to the functioning of the internal market, has to fully comply with Article 27 TRIPS. 43 From an institutional perspective, the Daiichi Sankyo judgment was certainly facilitated by the fact that, according to Article 218(6)(a)(v) TFEU, the adoption of such an agreement requires the consent of the European Parliament. The purpose of this provision is to guarantee the European Parliament the same rights of participation for agreements that regulate issues for which it would have a right of co-decision on the level of internal legislation. Yet, as we have seen further above, the possibilities of the European Parliament are still seriously curtailed since it can only choose between accepting or rejecting such an agreement, while in the ordinary legislative procedure (Article 294 TFEU) it can formulate amendments to a Commission proposal in the form of adopting its own "position".

³⁹ CJEU, Daiichi Sankyo, C-414/11, EU:C:2013:520.

⁴⁰ Ibid., para. 52.

⁴¹ Ibid., para. 53.

⁴² Ibid., para. 54.

⁴³ Ibid., para, 59.

5.2 The Economic Justification of the Trade-Relatedness of IPRs

Of course, 20 years after the adoption of TRIPS and after one decade of new IP bilateralism, it is also time to assess whether the economic rationale that justified the inclusion of IP rules in trade agreements has produced the respective economic results.

The results that can be identified are rather ambiguous. Against the backdrop of the trade deficit from which the US suffered in the 1980s and which convinced the US to push for higher standards of IP protection in the GATT Uruguay Round negotiations, the current situation must be utterly disappointing. While the US suffered from a historic peek of a trade deficit of about 3 % of its GDP in 1987, the US deficit first decreased in the years after the establishment of the WTO, but then constantly went up again at the end of last century to reach another historic peak of 5.6 % of the GDP in 2006, the deficit was still at 3.6 % in 2011. In absolute numbers the trade deficit in 2011 was at US\$ 558.0 billion. The trade deficit with China alone accounted for US\$ 295.5 billion. There are certainly many factors that influence the development of the balance of trade. Yet it seems that 20 years of US policy to promote higher standards of IP protection have failed to produce the expected positive results for the US trade balance.

There are also good reasons for this. Higher standards of IP protection have certainly improved global business opportunities of IP-oriented firms from the US and other technologically advanced countries. However, higher IP protection does not guarantee that domestic firms will continue to produce at home and sell more abroad. What has happened is that even technologically most advanced firms nowadays produce in countries with emerging economies and serve the markets of the high-tech countries from there. A typical example is Apple, which has largely transferred the production of its electronic devices to overseas and, thereby, contributed to the US trade deficit.

Hence, higher IP standards may well have the opposite effect as compared to that which was expected. In the new globalized world, production factors have become more mobile. The more uniform standards of IP protection do not guarantee that the most innovative countries will necessarily do better in international trade. Rather, more uniform standards of protection reduce the relative importance of IP as a

⁴⁴ See R. Oak (2012), 2011 Annual Trade Deficit is 3.7 % GDP, China Goods 2 % U.S. GDP, The Economic Populist of 10 February 2012.

⁴⁵ See R. Azevêdo (2014), Director-General of WTO, Speech before the Federal Circuit Bar Association, stating a "dramatic" increase in the knowledge component of trade expressed by total royalties of US\$ 310 billion in 2013 for cross-border licences.

⁴⁶ In early 2012, 40,000 people were employed by Apple in the US, and 20,000 abroad. But 700,000 people were employed by subcontractors that produce Apple devices. Practically all of these are employed abroad. See Ch. Dhuigg & K. Bradsher (2012), How the U.S. Lost Out on the iPhone Work, New York Times of 21 January 2012.

factor when firms decide where to produce and make other factors, such as labour costs, more important.

5.3 The Trade-Relatedness of IPRs as a Failed Political Strategy

The analysis shows that also technologically advanced states should reconsider their strategy of trying to improve their economic welfare by pushing for ever-more advanced standards of IP protection. Governments seem to be largely misinformed about the impact of their trade-related IP policies. This is even more the case with regard to bilateral agreements. This policy, including the mimicking of US bilateral-ism through other trading nations, has only fuelled a race for ever-higher standards that neither takes into account the need for a fair balancing of conflicting interests within IP systems nor the need for flexibility of especially economically less advanced countries.

The reasons why this development went so remarkably wrong, especially during the last decade of IP bilateralism, are predominantly of an institutional nature. Expansive IP standards serve the interests of some economically powerful right holders. Politicians are often wrong by equating the interests of their national right holders with the economic welfare of their own countries.

Yet this misunderstanding also shapes legal systems and accordingly produces politically unwanted and strange results. This can be illustrated by an example from the US relating to the protection of standard-essential patents (SEPs) against the import of infringing products in proceedings before the U.S. International Trade Commission (ITC) pursuant to Section 337 of the Tariff Act.⁴⁷ In purely domestic infringement cases, US courts tend to refrain from granting injunctive relief to owners of SEPs who have notified a FRAND commitment to the relevant standard-setting organization (SSO). US courts either argue that the FRAND commitment constitutes a contract with the SSO that authorizes third parties to use the patent ⁴⁸ or they rely on the *eBay* rule according to which an injunction as a specific form of equitable relief will not automatically be granted but depends on a four-factor test according to which especially the public interest must not argue against issuing the injunction. ⁴⁹ However, things are different when an infringement is claimed in proceedings before the ITC pursuant to Section 337, which provides a separate

⁴⁷ In general on such cases before the ITC see P.M. Bartkowski & E.H. Langdon (2012), Standard-Essential Patents: An Increasingly Contentious Issue at the U.S. International Trade Commission, Contemporary Legal Note Series No. 71 of July 2012.

⁴⁸ Microsoft Corp. v. Motorola Inc., 696 F.3d 872 (9th Cir. 2012).

⁴⁹ eBay Inc. v. MercExchange, L.L.C., 547 U.S. 388 (2006). For a case on SEPs in which the court has relied upon the eBay rule see Apple Inc. and Next Software, Inc. v. Motorola, Inc. and Motorola Mobility, Inc. (Fed. Cir. 25 April 2014), at 70-73 of the slip decision, available at: http://law.justia.com/cases/federal/appellate-courts/cafc/12-1548/12-1548-2014-04-25.html (accessed 30 June 2015).

remedy leading to an import ban similar to injunctive relief. In proceedings initiated by Samsung against Apple concerning the import of iPhones and iPads to the U.S. from China, the ITC concluded that Apple had indeed violated Samsung's SEPs and ultimately granted the import ban. ⁵⁰ Thereby the ITC held that neither the public interest factors contained in Section 337(d)(1) and (f)(1) nor Samsung's FRAND declaration would exclude the import ban. This decision caused the US President to use his power to veto the ITC order through the USTR a few weeks later. ⁵¹

This case is remarkable in several regards. Without going into the details of an economic assessment, the example of SEPs shows that, in certain instances, remedies for infringement can go too far and affect the public interest. National IP systems are able to find ways to reach appropriate results. However, the latter was not mirrored in proceedings before the ITC pursuant to Section 337, which provides a particularly powerful remedy in infringement cases. The case also highlights that Section 337 cannot only be used by US firms against imports of foreign firms. In the proceedings of this case the situation was exactly the other way round. The question of whether the President would have used his power to veto the import ban if the complainant had been a US firm and the opponent a foreign firm would only lead to speculation. Yet the veto seems in line with the standards nowadays applied by US courts in domestic proceedings. What matters more is that cases like this show how complex things have become nowadays, and that politicians should not believe that ever-stronger IP standards and enforcement measures serve the public interest and even the interests of their domestic firms. Sometimes, as the Samsung v. Apple case shows, the most innovative firms can become the victims of excessive trade-related IP rules.

References

Abbott, F.M. (2014), Trade Costs and Shadow Benefits: EU Economic Partnership Agreements as Models for Progressive Development of International IP Law, in J. Drexl, H. Grosse Ruse-Khan & S. Nadde-Phlix (Eds.), EU Bilateral Trade Agreements and Intellectual Property: For Better or Worse?, p. 159, Heidelberg: Springer

Azevêdo, R. (2014), Director-General of WTO, Speech before the Federal Circuit Bar Association, available at: http://www.wto.org/english/news_e/spra_e/spra38_e.htm (accessed 1 March 2015)

Ballreich, H. (1989), Enthält das GATT den Weg aus dem Dilemma der steckengebliebenen PVÜ-Revision?, GRUR Int. 1989, 747, Munich: C.H. Beck

Bartkowski, P.M. & Langdon, E.H. (2012), Standard-Essential Patents: An Increasingly Contentious Issue at the U.S. International Trade Commission, Contemporary Legal Note Series

⁵⁰ U.S. International Trade Commission, In the Matter of Certain Electronic Devices, Including Wireless Communication Devices, portable Music and Data Processing Devices, and Tablet Computers, Inv. No. 337-TA-794 (June 4, 2013).

⁵¹ See the veto letter of USTR Froman to Chairman Williamson of the ITC (August 3, 2013).

- No. 71 of July 2012, available at: http://www.wlf.org/upload/legalstudies/contemporarylegalnote/7-12Bartkowski_CLN.pdf (accessed 1 March 2015)
- Breitwieser, A. & Foster, N. (2012), Intellectual Property Rights, Innovation and Technology Transfer: A Survey, available at: http://mpra.ub.uni-muenchen.de/36094/1/Intellectual_Property_Rights_Innovation_and_Technology_Diffusion_Jan2012.pdf (accessed 1 March 2015)
- Bum Kim, J. (2014), Entrenchment of Regionalism: WTO Legality of MFN Clauses in Preferential Trade Agreements for Goods and Services, 13 World Trade Rev. 2014, 443, Cambridge: Cambridge University Press
- Chang, H.-J. (2007), Bad Samaritans: The Myth of Free Trade and the Secret History of Captialism, London: Bloomsbury Press
- Deere, C. (2009), The Implementation Game: The TRIPS Agreement and the Global Politics of Intellectual Property Reform in Developing Countries, Oxford: Oxford University Press
- Dhuigg, Ch. & Bradsher, K. (2012), How the U.S. Lost Out on the iPhone Work, New York Times of 21 January 2012, available at: http://www.nytimes.com/2012/01/22/business/apple-amer ica-and-a-squeezed-middle-class.html (accessed 1 March 2015)
- Drexl, J. (1990), Entwicklungsmöglichkeiten des Urheberrechts im Rahmen des GATT, Munich: C.H. Beck
- Drexl J. (1996), The TRIPs Agreement and the EC: What Comes Next After Joint Competence?, in F.-K. Beier & G. Schricker (Eds.), From GATT to TRIPs The Agreement on Trade-Related Aspects of Intellectual Property Rights, p. 18, Weinheim: VCH
- Drexl, J. (2014), Intellectual Property and Implementation of Recent Bilateral Trade Agreements in the EU, in J. Drexl, H. Grosse Ruse-Khan & S. Nadde-Phlix (Eds.), EU Bilateral Trade Agreements and Intellectual Property: For Better or Worse?, p. 265, Heidelberg: Springer
- Falvey, R. & N. Foster (2006), The Role of Intellectual Property Rights in Technology Transfer and Economic Growth: Theory and Evidence, available at: http://www.unido.org/fileadmin/ user_media/Publications/Pub_free/Role_of_intellectual_property_rights_in_technology_trans fer_and_economic_growth.pdf (accessed 1 March 2015)
- Griffith, J. (2012), Criminal Liability for Intellectual Property Infringement in Europe: The Role of Fundamental Rights, in Ch. Geiger (Ed.), Criminal Enforcement of Intellectual Property: A Blessing or a Curse, p. 191, Cheltenham: Edward Elgar
- Grosse Ruse-Khan, H. (2008), A Comparative Analysis of Policy Space in WTO Law, Max Planck Institute for Intellectual Property, Competition & Tax Law Research Paper Series No 08–02, available at: http://ssrn.com/abstract=1309526(accessed 1 March 2015)
- Grosse Ruse-Khan, H. (2011), Protecting Intellectual Property under BITs, FTAs, and TRIPs: Conflicting Regimes or Mutual Coherence, in K. Miles & C. Brown (Eds.), Evolution in Investment Treaty Law and Arbitration, p. 485, Cambridge: Cambridge University Press
- Grosse Ruse-Khan, H. (2012), From TRIPS to ACTA: Towards a New 'Gold Standard' in Criminal IP Enforcement, in Ch. Geiger (Ed.), Criminal Enforcement of Intellectual Property: A Blessing or a Curse?, p. 171, Cheltenham: Edward Elgar
- Hilty, R. et al. (2006), Statement of the Max Planck Institute for Intellectual Property, Competition and Tax Law on the Proposal for a Directive of the European Parliament and of the Council on Criminal Measures Aimed at Ensuring the Enforcement of Intellectual Property Rights, 37 IIC 2006, 970, Munich/Berlin: C.H. Beck/Springer
- H. Grosse Ruse-Khan et al. (2013), Principles for Intellectual Property Provisions in Bilateral and Regional Agreements, 44 IIC 2013, 878, Munich/Berlin: C.H. Beck/Springer
- Kur, A. & Levin, M. (2011), Intellectual Property in a Fair World Trade System Proposals for Reform of TRIPS, Cheltenham: Edward Elgar
- Lamping, M. et al. (2014), Declaration on Patent Protection Regulatory Sovereignty under TRIPS, 45 IIC 2014, 679, available at: http://www.ip.mpg.de/de/pub/aktuelles/patentdeclaration.cfm (accessed 1 March 2015)
- Maskus, K.E. (1997), The Role of Intellectual Property Rights in Encouraging Foreign Direct Investment and Technology Transfer, available at: http://www-wds.worldbank.org/servlet/

- WDSContentServer/WDSP/IB/1994/02/01/000009265_3970311123634/Rendered/PDF/multi_page.pdf (accessed 1 March 2015)
- Maskus, K.E. & J.H. Reichman (2005), International Public Goods and Transfer of Technology under a Globalized Intellectual Property Regime, Cambridge: Cambridge University Press
- Matthews, D. (2011), When Framing Meets Law: Using Human Rights as a Practical Instrument to Facilitate Access to Medicines in Developing Countries, 3 WIPO J. 2011, 113, Andover: Sweet & Maxwell
- Oak, R. (2012), 2011 Annual Trade Deficit is 3.7 % GDP, China Goods 2 % U.S. GDP, The Economic Populist of 10 February 2012, available at: http://www.economicpopulist.org/content/2011-annual-trade-deficit-37-us-gdp-china-goods-2-us-gdp (accessed 1 March 2015)
- Perez Pugatch, M. (2011), Intellectual Property Policy Making in the 21st Century, 3 WIPO J. 2011, 71, Andover: Sweet & Maxwell
- Seuba, X. (2013), Intellectual Property in Preferential Trade Agreements: What Treaties, What Content?, 16 J. W. Intell. Prop. 2013, 240, Oxford: Wiley-Blackwell
- U.S. Department of State (2014), History of the U.S. Trade Deficit, available at: http://economics.about.com/od/foreigntrade/a/trade_deficit_h.htm (accessed 1 March 2015)
- U.S. International Trade Commission, Section 337 Investigations Answers to Frequently Asked Questions, Publication No. 4105 of March 2009, available at: http://www.usitc.gov/intellec tual_property/documents/337_faqs.pdf (accessed 1 March 2015)
- USTR Froman to Chairman Williamson of the ITC (August 3, 2013), available at: http://www.forbes.com/sites/connieguglielmo/2013/08/03/president-obama-vetoes-itc-ban-on-iphone-ipads-apple-happy-samsung-not/ (accessed 1 March 2015)
- Washington Declaration on Intellectual Property and the Public Interest, adopted at American University Washington College of Law, Washington, D.C. on 27 August 2011, available at: http://infojustice.org/wp-content/uploads/2011/09/Washington-Declaration-Print.pdf (accessed 1 November 2014)
- Watal, J. (2011), From Punta del Este to Doha and Beyond: Lessons from the TRIPs Negotiating Processes, 3 WIPO J. 2011, 24, Andover: Sweet & Maxwell
- Yu, P.K. (2011), ACTA and Its Complex Politics, 3 WIPO J. 2011, 1, Andover: Sweet & Maxwell
 Yu, P.K. (2012), Intellectual Property and Human Rights in the Nonmultilateral Era, 64 Fla.
 L. Rev. 2012, 1045, Gainesville: University of Florida, Fredric G. Levin College of Law

The Political Foundations of TRIPS Revisited

Hanns Ullrich

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Abstract The contribution revisits the political foundations of the TRIPS Agreement with a view to determine its role and functioning under the changed socio-economic geopolitical conditions of today's world economic order. The Agreement, which was concluded as part of and under the pressure of the GATT/WTO trade package, provides for internationally uniform standards of adequate protection of intellectual property in all States Members of the WTO, regardless of the differences of their economic development, industrial structures and social needs. As a global "deep trade agreement", which governs not only cross border trade, but Members' internal markets, it raises issues both of its compatibility with the principle of comparative advantage underlying international trade, and of the legitimacy of its interfering with domestic market regulation. The flexibilities, which have been built into the TRIPS Agreement, may mitigate concerns. However, the growing new biand pluri-lateralism of regional free trade agreements with their asymmetric intellectual property rules, the re-distribution of economic power among the developed and

Prof. Dr. Dr. eh. Hanns Ullrich is Professor Emeritus at the Universität der Bundeswehr, Munich, Affiliated Research Fellow at the Max Planck Institute for Innovation and Competition, Munich, and Visiting Professor at the College of Europe, Brussels.

H. Ullrich (⊠)

Max Planck Institute for Innovation and Competition, Munich, Germany e-mail: hanns.ullrich@ip.mpg.de

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the emerging or rather the emerged countries, and the nature of strategic competition between globally acting multinational corporations have changed the rules of the game. The task ahead is to re-conceptualize the TRIPS Agreement as a framework regulation for national innovation markets, which at the same time are integrated into global markets to varying degrees. As such, it would form part of an open international economic law, which, in its turn, needs to be developed in order to overcome the rigid and already fading paradigms of international trade law. Only such a vision will help to accommodate intellectual property protection with the large diversity of industrial policies and with the many intellectual property-related public interests and policies, which WTO Members may or do adhere to.

1 Introduction

1.1 The Uruguay Round on Multilateral Trade Negotiations

When the so-called Uruguay Round of Multilateral Trade Negotiations was concluded by the signature of the Agreement on the Establishment of the World Trade Organization, the Agreement on the Trade-Related Aspects of Intellectual Property Rights (TRIPS) was supposed to serve as one of the three pillars supporting a new system of international trade. Although central to these negotiations and part of the "single package" deal of the mandatory multilateral trade agreements, TRIPS does not seem to share the political foundations of the Uruguay Round, whose general results focus on trade, mainly on trade in goods, and, as a new field, on trade in services.

¹ Signed at Marrakech on 15 April 1994. According to its Article II, the WTO Agreement provides the institutional framework for a series of agreements, namely, first, in Annex 1 thirteen, "Multilateral Agreements on Trade in Goods", including in particular the revised "GATT 1994" (Annex 1A), the "General Agreement on Trade in Services" (GATS, Annex 1B), the "Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS, Annex 1(C))". Second, in Annex 2, it contains the "Understanding on Rules and Procedures Governing the Settlement of Disputes (DSU)", and, third, in Annex 3 the "Trade Policy Review Mechanism". Annex 4 covers four "Plurilateral Trade Agreements". Whereas the Agreements contained in Annexes 1–3 are all "multilateral" and, as such, binding on all WTO members (Article II(2)), the Plurilateral Agreements of Annex 4, while parts of the WTO Agreement, bind only those Members, which have accepted them (Article II(3)). All the texts are accessible at www.wto.org/english/docs_e/legal_e.htm. The WTO Agreement entered into force on 1 January 1995 for 76 States including the EU as a Member (and EU Member States counted separately). As of July 2015 the WTO has 161 Members (EU Member States counted in addition to the EU), including the PR China (since 2001) and the Russian Federation (since 2012).

² See WTO Agreement Annex 1A: In addition to goods in general, which come under GATT 94, there is the Agreement on Agriculture and the Agreement on Textiles and Clothes. Plurilateral Agreements of Annex 4 relate to civil aircraft, dairy products, and bovine meat; the fourth concerns government procurement.

³ Although, in principle, the GATS Agreement covers all services equally, there are differentiated rules for some major sectors (see Article II(2) with Annex, and see specific annexes for air transport (exempt as such) and related services (which are covered), financial services, maritime transport, telecommunications). Telecommunications, in particular, remained the subject of continued negotiations and adjustments by way of protocols. Importantly, "services supplied in the exercise of government authority" are altogether excluded from the scope of GATS (see Article I(3), lit. b), lit. c).

1.1.1 Background and Results

The Contracting States of the General Agreement on Tariffs and Trade 1947 (GATT 1947) entered into the Uruguay Round of Multilateral Trade Negotiation with the experience of the world economic crisis, which had been triggered by the oil price shocks of the 1970s of the last century. The crisis had been characterized by slackening trade, high deficits in the balances of trade and payments, debt accumulation and growing unemployment. Part of the reaction had been protectionist measures taken outside the GATT or at its limits, such as voluntary selfrestraint agreements. In fact, much of trade, such as in agriculture or textiles.⁵ was not covered by GATT, and the codes agreed upon in the previous Tokyo Round had not been accepted by all, some not even by a majority of GATT Contracting States.⁶ Therefore, the objective was not merely to further liberalize and expand trade to the benefit of all countries, especially less developed contracting parties, including improved access to markets by the reduction and elimination of tariffs, quantitative restrictions and other non-tariff measures. Rather, it was also to strengthen the role of GATT, inter alia by bringing a wider range of world trade under agreed, effective and enforceable multilateral disciplines.⁸ Furthermore, the aim was to increase the responsiveness of the GATT system to the evolving international economic environment, taking account of changes in trade patterns, including the growing trade in high technology products, and to strengthen the interrelationship between trade policies and other economic policies affecting growth and develop-

⁴ See R. Senti (2000), WTO System und Funktionsweise der Welthandelsordnung, pp. 64 et seq. In fact, trade in manufactured products rose steeply from 1985 onwards, but not trade in agricultural goods, raw material or services, see P.-L. Girard (1995), De Punta del Este à Marrakech: Le Processus de Négociation, in Th. Cottier (Ed.), GATT-Uruguay Round: Nine Papers, pp. 23 et seq. (tableaux 1, 2).

⁵ Textiles came under the Multi-Fibre Agreement and its general market regulating mechanism, see M. Trebilcock & R. Howse (2005), The Regulation of International Trade, pp. 482 ff. seq.; K. Pfaue (2005) in M. Hilf & St. Oeter (Eds.), WTO-Recht, pp. 315 et seq.; for the total of 173 export restraint arrangements in all sectors, including electronics, automobiles etc. see P.-L. Girard (1995), De Punta del Este à Marrakech: le processus de négociation, in Th. Cottier (Ed.), GATT-Uruguay Round: Nine Papers, p. 28 (tableau 5).

⁶ See Ch. Bail (1990), Das Profil einer neuen Welthandelsordnung: Was bringt die Uruguay Runde?, EuZW 1990, 433 (Teil 1), 465 (Teil 2), at 434 et seq.; J. Neugärtner (2010) in M. Hilf & St. Oeter (Eds.), WTO-Recht, pp. 86 et seq. (no. 24).

⁷ Tariffs had already been reduced considerably, in particular by the Kennedy and Tokyo Rounds of trade negotiations to an average of 6.3 %, see J. Neugärtner (2010) in M. Hilf & St. Oeter (Eds.), WTO-Recht, p. 86 (no. 22). Although some products remained under high tariff protection, this reduction caused a shift to non-tariff barriers both as a means of protectionism and as an objective of trade negotiations, see J. Neugärtner (2010) in M. Hilf & St. Oeter (Eds.), WTO-Recht, pp. 86 et seq. (nos. 2, 3 et seq.).

⁸ See supra n. 6.

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ment. The range of subjects to be covered was large enough in the field of goods alone, but a second prong was added by the "Declaration of Punta de Este", which related to trade in services, a matter not yet covered by the GATT 47. Clearly, however, the concern in both fields was with bringing the principle of comparative advantage to bear as widely as possible with a view to enhance overall economic welfare. The perspective was widening trade, the goal was general market access, the means a revised system of generally accepted and observed legal rules, the purpose economic growth and a reduction of both trade tensions and of the economic divide between developed and developing countries.

When after 7 years of repeatedly disrupted negotiations¹² the Uruguay Round was concluded, the Marrakech Agreements were hailed for instituting a new and broad legal framework for international trade relations and for promising a quantum leap in trade and economic growth.¹³ In tactical terms, the success was attributed to

⁹ See Ministerial Declaration on the Uruguay Round of Multilateral Trade Negotiations of 20 September 1986 ("Declaration of Punta del Este"), 25 Int'l Leg. Mat. 1623, sub A (iii), (iv).

¹⁰ See supra n. 9. The Declaration had two parts. Part I on "Negotiations on Trade in Goods" covered sub D a long list of subjects ranging from tariffs and non-tariff measures to types of products, types of measures, institutional issues (dispute settlement), "trade-related aspects of intellectual property rights, including trade in counterfeit goods" and trade-related investment measures. Part II on "Negotiation of Trade in Services" was a rather general and vague mandate. In essence, it originated from a U.S. initiative undertaken right after the conclusion of the Tokyo Round.

¹¹ Following a summary assessment of the state of international trade and the reasons of its crisis, the philosophy of the Uruguay Round, including its stress on trade in high technology goods (but with no mentioning of intellectual property) has found its politically widely accepted expression in "Trade Policies for a Better Future" – The Report. This was a report given by 7 eminent persons under the chairmanship of F. Leutwiler (= "Leutwiler Report") upon the informal initiative of A. Dunkel, then Director-General of GATT, see A. Dunkel (1987), Trade Policies for a Better Future – The "Leutwiler Report", the GATT and the Uruguay Round, pp. 9 et passim.

¹² For a detailed historical account of the negotiations see J. Croome (1995), Reshaping the World Trading System – A History of the Uruguay Round, passim; R. Senti (2000), WTO System und Funktionsweise der Welthandelsordnung, pp. 75 et seq.; P.-L. Girard (1995), De Punta del Este à Marrakech: le processus de négociation, in Th. Cottier (Ed.), GATT-Uruguay Round: Nine Papers, pp. 1 et passim (tableaux 1, 2); Ch. Bail (1990), Das Profil einer neuen Welthandelsordnung: Was bringt die Uruguay Runde?, EuZW 1990, 435, 465 passim. As regards the TRIPS Agreement more particularly see G. Dinwoodie & R. Dreyfuss (2012), A Neofederalist Vision of TRIPS: Building a Resilient International Intellectual Property System, pp. 29 et passim; more critical also with respect to the negotiation process P. Drahos & J. Braithwaite (2002), Information Feudalism – Who Owns the Knowledge Economy?, pp. 132 et passim.

¹³ See the contributions in H. J. Bourgeois, F. Berrod & E. Gippini Fournier (1995), The Uruguay Round Results; with a comparison of economic estimates by J. Pelkmans, (1995), The Economic Significance of the Round, in H. J. Bourgeois, F. Berrod & E. Gippini Fournier (Eds.), The Uruguay Round Results, pp. 43, 51 et seq. and in OECD (1995), The New World Trading System – Readings. The reduction of tariffs by 38 % on average to an average of 3.9 % (F. Behrens (2010) in M. Hilf & St. Oeter (Eds.), WTO-Recht, p. 95 (no. 19)) stands out more as a symbol than as a core result.

several factors, in particular to the single package or rather to the "accept-all-or-getnothing" approach of bundling all multilateral agreements together, as envisaged already in the Declaration of Punta del Este. 14 However, the success was also the result of threats of unilateral action made mainly by the USA, which primarily but not only developing countries feared, 15 and it was due to negotiating parties engaging in varying coalition building along and across the North/South divide. In terms of substantive coverage, there was a big leap forward, indeed. Agriculture and textiles had been brought under multilateral agreements on goods with a perspective of liberalization. ¹⁶ Technical barriers to trade, pre-shipment inspection, sanitary and phyto-sanitary measures, rules on origin, on subsidies, on antidumping, on investment measures, and on safeguards had been introduced, broadened and/or revised. 17 Moreover, GATS had added an entire new prong to the international trade system, albeit one that still needed to be developed and complemented. 18 Yet, whether the promises made as a matter of a trade bargain were held, in particular whether the implementation of the agreements on the national level was satisfactory in terms of better access for developing countries' goods to developed countries' markets was soon to re-emerge as an issue. 19

¹⁴ Supra n. 9, sub B(ii).

 ¹⁵ In the oilseed dispute, the EU preferred to give in when the US threatened to increase tariffs to a
 100 %, see for this "Blair House" Agreement R. Senti (2000), WTO System und Funktionsweise der Welthandelsordnung, pp. 102 et seq.; J. Croome (1995), Reshaping the World Trading System – A History of the Uruguay Round, pp. 112 et passim, 238 et passim.

¹⁶ For details see K. Pfaue (2005), in M. Hilf & St. Oeter (Eds.), WTO-Recht. pp. 317 et seq. (textiles), H. Jessen (2010), in M. Hilf & St. Oeter (Eds.), WTO-Recht, pp. 366 et seq. (agriculture); M. Trebilcock, R. Howse & A. Eliason (2013), The Regulation of International Trade, pp. 434 et passim, 447 et seq.

¹⁷ By contrast, the Agreement on Government Procurement, although most important, remained a plurilateral agreement (WTO Agreement, Annex 4, as amended by a Revision Agreement effective 6 April 2014) with only 44 members (including the EU and its Member States) almost all of them developed countries (in an economics sense), see for the problems of extending membership G. Göttsche (2010), in M. Hilf & St. Oeter (Eds.), WTO-Recht, pp. 535 et seq. (no. 49), Currently, 11 more States are negotiating accession, including the PR China.

¹⁸GATS contains a specific sort of "implementation/negotiation" agendas in Article VI(4) on "disciplines" relating to qualification criteria etc., Art. X on emergency safeguard measures, Article XIII on public procurement of services (which are not yet included in GATS) and Article XV on subsidies. In addition, Article XIII provides for "Negotiations of Specific Commitments" for progressive liberalization, which, may be bi-, pluri-, or multilateral. For the state of progress see M. Michealis (2010), in M. Hilf & St. Oeter (Eds.), WTO-Recht, pp. 447 et seq. (no. 49). The most ambitious project are the negotiations for a plurilateral "Trade in Services Agreement (TISA)", see J. Marchetti & M. Roy (2014), The TISA Initiative: An Overview of Market Access Issues, 48 J.W.T. 2014, 683.

¹⁹ For the "post Uruguay" process see S. Hörmann (2010), in M. Hilf & St. Oeter (Eds.), WTO-Recht, pp. 687 et passim; also infra Sect. 2.3.

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1.1.2 The Legal Paradigm Underlying the WTO 1994 Agreements

Clearly, however, as a framework regulation of international trade, the Marrakech set of agreements marked the high tide of a legal paradigm, which was bound to change. ²⁰ It was based on the concepts of States ²¹ negotiating as such for trade concessions—equal or differentiated—on the basis of sovereignty and reciprocity, ²² of States conceding to all Members of the negotiation round the same advantages as they agreed upon with any of the Members, ²³ and of States providing for goods originating from other Members the same treatment to which domestic goods or services (as well as persons) are subject under internal law. ²⁴ It also rested on the idea of States defending their interests at their borders rather than intervening in the domestic market regulation of other Members, ²⁵ of rules distinguishing to this end between trade-distorting or discriminatory "outbound" (extraterritorial) effects and the internal effects of domestic market regulation in the national public interest, ²⁶ and of rules binding, i.e. obliging and entitling only the States

²⁰ For the principles governing the WTO as a legal order see also G. Göttsche (2010), in M. Hilf & St. Oeter (Eds.), WTO-Recht, pp. 15 et seq.; P.-T. Stoll & F. Schorkopf (2006), WTO – World Economic Order, World Trade Law, pp. 31 et passim.

²¹ Including the EU as a member of WTO in its own right, see S. Hörmann (2005), in M. Hilf & St. Oeter (Eds.), WTO-Recht, § 3 (nos. 18 et seq.) and § 6 (no. 45).

²² See WTO Agreement, Preamble, recital 3; GATT 1947, preamble, recital 3; not mentioned in the preamble of GATS, as GATS signals the transition to new concepts, see infra Sect. 2.3.3.

²³ Articles I, II GATT 47, Article II GATS. This most-favored-nation (MFN) rule is frequently seen as one prong of a more general principle of non-discrimination (G. Göttsche (2010), in M. Hilf & St. Oeter (Eds.), WTO-Recht, § 4, nos. 40 et seq.; M. Trebilcock, R. Howse & A. Eliason (2013), The Regulation of International Trade, pp. 29 et seq.), the other prong being the principle of national treatment (infra n. 24). However, due to the difference of the connecting factor – States v. goods – the difference is not only one of outbound v. inbound effects, but of levels of discrimination, the MFN rule producing rather ambivalent, if not anti-liberalization effects.

²⁴ Article III GATT 47, Article 2 TRIMS Agreement, Article 2(3) SPS Agreement; Article XVI(1), XVII GATS, Art.: III Government Procurement Agreement. The latter two rules extend national treatment to the persons supplying goods or services. By contrast, the national treatment rules of international conventions on intellectual property, such as Article 2 Paris Convention for the Protection of Industrial Property, Article 15 Berne Convention on the Protection of Works of Literature and the Arts, protect persons, and so does Article 3 TRIPS Agreement.

²⁵ Typical examples are tariffs and quantitative restrictions (Articles II, XI, XIII GATT 47), antidumping measures (Article VI GATT and the Agreement on the Implementation of Article VI GATT 94), or the Agreement on Safeguards (implementing Article XIX GATT 94). Again, the GATS Agreement signals a transition to new concepts, as services need to be rendered in the "importing" country (or country of destination), whose internal market regulation then becomes a matter of trade, and it does so even if the regulation does not constitute a discriminatory measure, but only an "unnecessary impediment to trade" see M. Michealis (2010), in M. Hilf & St. Oeter (Eds.), WTO-Recht, § 20, nos. 101 et seq., see also Article 2.2 TBT Agreement.

 $^{^{26}}$ Typical examples are the Agreement on Subsidies and Compensatory Measures, but also Article 2.1. TBT Agreement.

internationally, and market actors only internally as a matter of territorial law.²⁷ While the entire set of these instruments of international trade regulations has developed into a rule-based framework for—more or less interdependent or merging—national markets, with the quasi-juridical settlement of disputes having become in effect its hallmark, ²⁸ its subjects are the States, the connecting factors are the macroeconomic effects of trade and trade measures at State levels, and redress of violations remains a matter of (controlled) retaliation by trade sanctions rather than by direct compensation of losses.²⁹ Actual harm done to individual market actors, their rights and remedies are a matter of the sub-WTO national level, that is to say of Members' internal legal order only,³⁰ and so it remained even where the harm is, in its turn, the result of other market actors' individual conduct.³¹

1.2 The TRIPS Agreement: A Misfit?

The Agreement on the Trade-Related Aspects of Intellectual Property Rights does not seem to fit into the legal paradigm of the WTO Agreements of 1994 as described here. While the "Trade-Related Aspects" of Intellectual Property Rights, including "Trade in Counterfeit Goods" were on the agenda of the "Negotiation on Trade in Goods" of the Punta del Este Declaration (Part I), TRIPS like GATS has been negotiated separately and is conceived of, again like GATS, as a self-contained agreement, whose relation to trade is due to the "single-package" deal. Thus, it forms part of the overall trade bargain, but it is not specifically connected to trade concessions nor does it form part of the regime of goods or of services. It is not based on a principle of reciprocity in the sense of Members making each other mutually advantageous concessions regarding their respective levels of protection against foreign trade. Rather the situation is the reverse-one, since the concessions are made from freedom of trade with a view to reduce an alleged distortion of

²⁷ This is the issue of direct applicability of WTO law at the national level, see S. Hörmann & J. Neugärtner (2010), in M. Hilf & St. Oeter (Eds.), WTO-Recht, § 8, nos. 27 et passim.

²⁸ See M. Hilf (2010), in M. Hilf & St. Oeter (Eds.), WTO-Recht, § 7, no. 1 (the "heart of the WTO"), and the place given to the Dispute Settlement Understanding by e.g. M. Trebilcock, R. Howse & A. Eliason (2013), The Regulation of International Trade, pp. 12 et passim; A. Lowenfeld (2002), International Economic Law, pp. 151 et passim.

²⁹ See Article 22 DSU, for details M. Hilf (2010), in M. Hilf & St. Oeter (Eds.), WTO-Recht, § 7, nos. 58 et passim.

³⁰ See J. Neugärtner (2010), in M. Hilf & St. Oeter (Eds.), WTO-Recht, § 8, nos. 1 et passim; see also J. Neugärtner (2005), in M. Hilf & St. Oeter (Eds.), WTO-Recht, § 28, nos. 51 et passim regarding reform concepts.

³¹ See Article XVIII GATT 47/94 (State Trading Enterprises); Articles VIII, XI GATS (monopolies and exclusive service supplies) Article IX GATS (business practices); in essence, the latter rules of GATS represent competition rules, which Members are obliged to implement.

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trade. 32 The Agreement contains a MFN clause (Article 4), actually a rule, which is not easily applied to international intellectual property protection.³³ Its provision on national treatment of foreign nationals is but a replica of those, which are contained in international conventions on intellectual property for the last 130 years or so.³⁴ As has been generally acknowledged early on, the essence of the TRIPS Agreement, therefore, is not in its trade-relatedness in any classical connotation, but in its fairly detailed rules obliging Members to provide within their national territories for "adequate standards and principles concerning the availability, scope and use of (trade-related) intellectual property rights"35 and for "effective and appropriate means for the enforcement" of these rights. 36 Thus, the focus changes totally, first, from liberalizing interstate trade to requiring Members to establish a specific regulation of their respective internal markets, and, second, from rules on statedetermined flows of goods and services to principles defining the property positions of market actors. This is not to say that there is no longer a link to the economic roots of the Uruguay Round. The problem of counterfeit goods originating mainly from certain "emerging" countries ³⁷ had been a concern of the developed countries

³² See TRIPS Preamble, 1st recital, adopting the objective as set by the Declaration of Punta del Este. Negotiations seem to have been conducted also under the heading of "fairness" (Ch. Bail (1990), Das Profil einer neuen Welthandelsordnung: Was bringt die Uruguay Runde?, EuZW 1990, 467; for a detailed account J. Croome (1995), Reshaping the World Trading System – A History of the Uruguay Round, pp. 11 et seq., 130 et passim, 251 et passim, 283, 318 et seq.), although that heading fits the counterfeiting issue better than intellectual property in general (see M. Trebilcock, R. Howse & A. Eliason (2013), The Regulation of International Trade, pp. 515 et seq.) More to the point is the heading chosen by A. Otten (1995), Improving the Playing Field for Exports: The Agreement on Intellectual Property, Investment Measures and Government Procurement, in Th. Cottier (Ed.), GATT-Uruguay Round: Nine Papers, p. 67. A broader picture is presented by G. Dinwoodie & R. Dreyfuss (2012), A Neofederalist Vision of TRIPS: Building a Resilient International Intellectual Property System, pp. 29 et seq.

³³ The concern is about bilateral or regional agreements providing for preferential treatment. However, the MFN-rule of Article 4 TRIPS is difficult to apply, see UNCTAD–ICTSD (2005), Resource Book on TRIPS and Development, pp. 63 et seq., 77 et passim; G. Dinwoodie & R. Dreyfuss (2012), A Neofederalist Vision of TRIPS: Building a Resilient International Intellectual Property System, pp. 102 et seq.; A.M. Pacon (1996), What will TRIPS Do for Developing Countries?, in F.-K. Beier & G. Schricker (Eds.), From GATT to TRIPS, pp. 329, 335 et seq.; P. Katzenberger (1996), TRIPS and Copyright Law, in F.-K. Beier & G. Schricker (Eds.), From GATT to TRIPS, pp. 59 et seq.

³⁴ Article 2 Paris Convention for the Protection of Industrial Property of 20 March 1883; Article 5 Berne Convention for the Protection of Works of Literature and the Arts of 9 September 1886.

³⁵ TRIPS, Preamble, recital 2, lit. b).

³⁶ TRIPS, Preamble, recital 2, lit. c).

³⁷ At the time mainly the East Asian "Tiger States", then not yet being considered as "emerging markets", but as emerging rivals.

for quite some time,³⁸ and the trade potential of high technology products made by these developed countries had found its way from the *Leutwiler* Report into the Declaration of Punta del Este.³⁹ But does any of this sufficiently explain the 180° turn of approach from sovereign border control to providing mandatory rules for the organization of Members' national markets with all that this means in terms of loss of sovereign control? And who are the market actors, who are supposed to benefit from the new paradigm?

2 TRIPS: From a World Trading System to Market Regulation Worldwide?

2.1 The Search for Adequate Standards of Protection Abroad

Enquiring again into the driving forces behind the extension of the trade framework of the Uruguay Round to agreements regulating Members' domestic markets⁴⁰ is the more apposite as the subject matter, the protection of intellectual property rights, does not naturally lend itself as an object of trade negotiations and

³⁸ See only R. Knaak (1988), National and International Efforts Against Trademark Counterfeiting – A Progress Report, 19 IIC 1988, 581; E. Vermulst et al. (1988), Counterfeiting in GATT, the EEC and the Netherlands, Searching for New Remedies, Leg. Iss. Eur. Integr. 1988, 61. Counterfeiting had already been suggested as a topic for the Tokyo Round, see Ch. Bail (1990), Das Profil einer neuen Welthandelsordnung: Was bringt die Uruguay Runde?, EuZW 1990, 468 with references. While at the time it failed to make its way into a code, it definitely was on the subjects list of the Punta del Este Declaration. In fact, an Anti-Counterfeiting Code would have been accepted even by TRIPS-reluctant developing countries, see J. Croome (1995), Reshaping the World Trading System – A History of the Uruguay Round, pp. 11 et seq., 225.

³⁹ See Leutwiler–Report in A. Dunkel (1987), Trade Policies for a Better Future – The "Leutwiler Report", the GATT and the Uruguay Round, pp. 11, 18 et seq.; Declaration of Punta del Este, sub I. A(iii). The link to intellectual property is missing in the Leutwiler-Report just as (or because) nowhere does it take account of the role of multi-national companies as the main actors of international trade. Given that the role of these undertakings had been a main point of discussion and controversy in the late sixties and the seventies of the last century, this lacuna actually is a deficit of the Leutwiler-Report.

⁴⁰ For the following see also W. Cornish & K. Liddell (2015), The Origins and Structure of the TRIPS Agreement, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 3 (this volume); P. Roffe (2015), Overview of the Normsetting Developments in the New TRIPS World, in A. Autenne et al. (Eds.), Droit, Économie et Valeurs, Hommage à B. Remiche, p. 673 et passim. Other agreements regulating the market "behind the border" are the TBT-Agreement and, most important, the GATS Agreement, see infra Sect. 2.3.3. However, the GATS Agreement has not held its promises precisely because of its claim to behind the border-regulation, see supra n. 18, infra n. 142.

concessions.⁴¹ For one thing, as a legal matter, intellectual property protection is governed by a principle of territoriality, which represents not simply a conflict of laws rule, but historically and functionally stands for the State's sovereign power to define its industrial policy in terms of protection, which meet the structure and the needs of its economy.⁴² For another, as a political matter, the claim to "effective and adequate protection of intellectual property rights",⁴³ as made by major industry groups of developed countries⁴⁴ and endorsed and adopted by their governments,⁴⁵ ran contrary to a decade-long trend of discussions and negotiations on international convention standards for the protection of intellectual property, which would allow developing countries a specific differentiation of protection and easier access to the use of knowledge created elsewhere.⁴⁶ For such a demand, however, these countries generally had no real bargaining power.⁴⁷

⁴¹ Certainly not if the protection of intellectual property is advocated on grounds of natural rights/ human rights, because then it is a matter of law, not of trade. This is not the place to discuss the legitimacy and limits of intellectual property in the former respect; for a short to the point discussion from a trade perspective see M. Trebilcock, R. Howse & A. Eliason (2013), The Regulation of International Trade, pp. 515 et seq. A broader discussion would have to start with P. Drahos (1996), A Philosophy of Intellectual Property, passim; and would lead into the labyrinth of constitutional law.

⁴² See H. Ullrich (1996), Technology Protection According to TRIPS: Principles and Problems, in F.-K. Beier & G. Schricker (Eds.), From GATT to TRIPS, p. 357, 361 et passim, with references. ⁴³ TRIPS Agreement, Preamble, 1st recital.

⁴⁴ See The Intellectual Property Committee (USA), Keidanren (Japan), UNICEC (Europe), Basic Framework of GATT Provisions on Intellectual Property – Statement of Views of the European, Japanese and United States Business Communities, June 1988, reprinted in F.-K. Beier & G. Schricker (1989), GATT or WIPO – New Ways in the International Protection of Intellectual Property, p. 355. The Intellectual Property Committee grouped 13 major U.S. multinational companies mainly from the pharmaceutical and information industries. For the increasing involvement and influence of industry as regards strengthening of international intellectual property in general and the TRIPS Agreement in particular see D. Matthews (2002), Globalizing Intellectual Property Rights the TRIPS Agreement, p. 12 et passim.

⁴⁵ See the Suggestion by the United States for Achieving the Negotiation Objective, MTN. GNG/NG 11/W/14 of 20 October 1987 and MTN. GNG/NG 11/W/16 of 17 October 1988 in F.-K. Beier & G. Schricker (1989), GATT or WIPO – New Ways in the International Protection of Intellectual Property, pp. 187, 203. The EU followed only slowly, see Guidelines proposed by the European Community for the negotiations on trade-related aspects of intellectual property rights, MTN.GNG/nG117W/16 of 19 November 1987, reprinted in ibid., p. 203.

⁴⁶ Part of this is the "technology transfer" debate, see P.-T. Stoll (1994), Technologietransfer – Internationalisierungs- und Nationalisierungstendenzen, passim, regarding a revision of the Paris Convention, p. 235 et passim; P.G. Sampoth & P. Roffe (2012), Unpacking the International Technology Transfer Debate: Fifty Years and Beyond, ICTSD Discussion Paper; for a summary presentation P. Roffe & T. Tesfachew (2001), The Unfinished Agenda, in S. Patel, P. Roffe & A. Yusuf (Eds.), International Technology Transfer: The Origins and Aftermath of the United Nations Negotiations on a Draft Code of Conduct, pp. 381, 386 et seq.

⁴⁷ With the cold war ending and the general economic liberalization beginning, political and/or ideological cohesion between the developing countries (and their allies outside WIPO or GATT) also loosened, see A.M. Pacon (1996), What will TRIPS Do for Developing Countries?, in F.-K. Beier & G. Schricker (Eds.), From GATT to TRIPS, pp. 332 et seq.

2.1.1 The Causes: Concerns About International Competitiveness

The reason for trying to reverse this latter trend by an apparent form of a counterattack from the trade field has not been the threat posed by counterfeiting and piracy or the impossibility of fighting it satisfactorily at the borders. There is, of course, a certain logic in asking for sufficient protection in the country of exportation, thus for an extension of "trade" regulations to domestic markets, as this would help to suppress counterfeiting and piracy where it originates. However, suppressing these practices alone was not enough. For one thing, counterfeiting and piracy are only a particular part of broader imitation—or possibly of learning—strategies, which pose a competitive threat in the long term. This is particularly so, if more and more countries adhere to it, and thus must be expected to become ever more economically efficient. For another thing, it was precisely the fear of losing their techno-industrial lead or, more generally, a sufficient level of international competitiveness, which made developed countries insist on TRIPS.

The United States in particular was worried about a decline of its position on high technology markets as compared to other developed and to "newly industrializing" countries (NIC), while the obvious way to overcome its comparative disadvantage as regards, e.g. wage levels or manufacturing skills, was precisely to push innovation based on high technology.⁴⁹ On the one hand, therefore, it sought to improve the domestic conditions of innovation in terms of financing of RandD and of bundling RandD and innovation efforts as well as to protect the domestic market better by enhancing intellectual property.⁵⁰ Much the same approach was followed by the EU⁵¹ and its major Member States.

⁴⁸ As evidenced by ever stricter and broader, yet unsatisfactory border control regulation, see for the EU lately Regulation (EU) No. 608/2013 of the European Parliament and the Council of 12 June 2013 concerning customs enforcement of intellectual property rights and repealing Council Regulation (EC) No. 1383/2003, OJEU 2013 1 181, 15; Th. Jaeger et al. (2010), Statement of the Max Planck-Institute for Intellectual Property, Competition and Tax Law on Customs Enforcement of Intellectual Property Rights, 41 IIC 2010, 674; S. Rinnert (2014), Die neue Customs-IP-Enforcement-Verordnung, GRUR 2014, 241. See also infra n. 127.

⁴⁹ See J.A. Young et al. (1985), Global Competition – The New Reality, Vol. II of the Report of the President's Commission on Industrial Competitiveness, pp. 8 et passim, 59 et passim, 91 et seq.; 303 et passim; S. Ostry & R. Nelson (1995), Techno-Nationalism and Techno-Globalism, pp. 1 et passim; R. Norton (1986), Industrial Policy and American Renewal, 24 JEL 1986, 1.

⁵⁰ See J.A. Young et al. (1985), Global Competition – The New Reality, Vol. II of the Report of the President's Commission on Industrial Competitiveness, pp. 59 et seq., 253 et seq., 304 et seq. Recurrent themes are linking university and industry research, increasing both public and private Rand D–spending, facilitating joint Rand D by industry by the National Cooperative Research Act, and enhancing intellectual property for cutting-edge technology (e.g. biotechnology, computer hardware and software, aircraft), an infamous illustration being semi-conductor technology, whose protection the U.S. imposed globally by virtue of the reciprocity principle, but whose importance was to vanish within a few years completely as a result of technological change, see E.-P. Heilein (2002), Die Bedeutung des Rechtsschutzes für integrierte Halbleiterschaltkreise in der Praxis, passim.

⁵¹ See for the expansion of the EU research and technology policy by framework programs L. Guzetti (1995), A Brief History of European Research Policy, pp. 71 et passim; for the facilitation of cooperative Rand D by industry through exempting categories of cooperation

On the other hand, for the USA, the concern was not only about losing dominance on its domestic market. Rather, it was about an increasing trade deficit regarding even high technology products by reference to Japan, the EU and potentially also to the NIC, a concern which made it worry about insufficient intellectual property protection abroad. ⁵² As regards both its rivals' domestic markets and other supply markets, it complained that, due to insufficient protection of "its rights", the fruits of US inventiveness or creation were reaped away or not adequately respected and compensated by competitors or by consumers respectively. ⁵³ From the perspective of the homeland of multinational corporations and in view of an already advanced "globalization of industry", ⁵⁴ these markets simply

agreements from the application of Article 101 TFEU (ex Article 85 TEC) by way of so-called group (or block) exemption regulations, see H. Ullrich (1988), Kooperative Forschung und Kartellrecht – eine Kritik der Wettbewerbsaufsicht über die Forschungsgemeinschaften in den USA, der EWG und der Bundesrepublik Deutschland, passim, comparing the U.S., the EU and the German approaches at the time. As regards intellectual property protection, the major moves at the time (in addition to the modernization of trademark law by the Directive 89/104/EC of 21 December 1988 on the approximation of the law of trade marks, OJEC 1989 L 40, 1 (now Directive 2008/95/EC of 22 October 2008, OJEU 2008 L 299/25) and the introduction of the Community Trade Mark by Reg. 40/94 of 20 December 1993, OJEC 1994 L 11, 1 (now Reg. 207/2009 of 26 February 2009, OJEU 2009 L 78, 1) were the adoption of Directive 91/250 EEC of 14 May 1991 on the legal protection of computer programs, OJEC 1991, 1 122, 2 (now Directive 2009/24/EC of 23 April 2009, OJEU 2009 L 111, 16) and the Directive 92/100 EEC of 19 November 1992 on the rental right and lending right and on certain copyright related rights in the field of intellectual property, OJEC 1992 L 246, 61 (now Directive 2006/115/EC of 12 December 2006, OJEU 2000 L 376, 28).

⁵² See references supra n. 49.

⁵³ See J.A. Young et al. (1985), Global Competition – The New Reality, Vol. II of the Report of the President's Commission on Industrial Competitiveness, p. 324 et passim; see also A. Otten (1995), Improving the Playing Field for Exports: The Agreement on Intellectual Property, Investment Measures and Government Procurement, in Th. Cottier (Ed.), GATT-Uruguay Round: Nine Papers, p. 72. The problem with this argument is the implicit assumption that export markets somehow "belong" to the owner of intellectual property rights in that they should yield protected profits in the same way as does the domestic market (to which these profits would then be "repatriated"). The proper substance of the argument is that it points to risks of distorted competition, which become relevant when geographic markets are no longer seen as separate but as – economically, if not legally – integrated.

⁵⁴ According to OECD (1996), Globalization of Industry – Overview and Sector Reports, pp. 22 et passim, it is due to globalization that international trade had changed in that high technology and high wage industries had spread across more countries, international sourcing of intermediate products had taken an increasing share of international trade (50–70 % of manufactured imports) and had risen more rapidly than domestic sourcing. Also intra-firm trade had grown rapidly (1/3 of U.S. trade; 43 % on average of US–EU merchandise trade, 71 % of US–Japan merchandise trade); i.e., market transactions were replaced by international transactions within the (multi-national) firm. Inter-industry trade (meaning trade between countries within the same industry group) also grew typically for major countries from around 50 % in 1970 to 70 % and beyond in 1990. All this meant that "In the future trade will be structured particularly by strategies in high technology, knowledge-intensive industries that reflect the importance of local supply relationships, the necessity for firms to be close to markets for final products and to highly control trade in intermediate products" (ibid. p. 31). The Report also notes (pp. 41 et seq.) globalization of Rand

appeared to be part of an international market rather than "foreign" import markets, whose terms and regulations must be recognized and accepted *tels quels* as a matter of respecting other nations' sovereignty.

2.1.2 The Means: Trade Leverage

The means to translate such search for control of export markets, in fact of what appeared to multinational corporations to be their markets of destination, into a legal claim for protection by intellectual property rights were trade negotiations, either bilateral⁵⁵ or multilateral. They had been envisaged for quite some time by the USA,⁵⁶ since they offered a way to overcome the political stalemate and frustrating experience of revision conferences of the Paris Union by using the trade levers of market access, particularly if combined with the "single package" approach. Trade negotiations for a full and satisfactory set of internationally agreed national rights of intellectual property could also be linked directly to trade policy as such, and they could be accompanied, as they actually were,⁵⁷ by the threat of unilateral action rather than remain confined to mere systemic argument and political persuasion as typically it has been the case for negotiations held within the framework of intellectual property conventions. In addition, the trade approach promised effective enforcement tools should contracting parties later on not abide by the rules they had been brought to agree upon.⁵⁸

D and technology (e.g. high Rand D intensity of foreign subsidiaries, p. 42, fig. 1.3), and strong trends of foreign direct investment due to technology-related factors (pp. 31 et seq.) and due to international inter-firm collaboration, including technology-based strategic alliances (pp. 43 et seq., table 1.18: 1660 in information technology alone out of a total of 4182, the main factor being technological complementarity (30–40 %) and market access (up to 50 %)). See also S. Ostry & R. Nelson (1995), Techno-Nationalism and Techno-Globalism, p. 10 et passim, and infra n. 134.

⁵⁵ As regards bi-lateral or regional (free) trade agreements, the prototype was Chapter 17 (Articles 1701–1721 with annexes) of the North American Free Trade Agreement (NAFTA), which was negotiated in parallel with the TRIPS Agreement by Canada, Mexico and the USA and concluded on 17 December 1992 (32 Int'l-Lag. Mat. 1993, 605), see I. Govaere (1997), Convergence, Divergence and Interaction of Regional Trade Agreements and the Agreement on Trade Related Aspects of Intellectual Property Rights, in P. Demaret et al. (Eds.), Regionalism and Multilateralism After the Uruguay Round, pp. 465, 479 et seq.

⁵⁶ See J.A. Young et al. (1985), Global Competition – The New Reality, Vol. II of the Report of the President's Commission on Industrial Competitiveness, p. 344 et passim, analyzing the strategic advantages of various uni-, bi- and multi-lateral approaches.

⁵⁷ See M. Trebilcock, R. Howse & A. Eliason (2013), The Regulation of International Trade, pp. 524 et seq.; M. Haedicke (1997), Urheberrecht und die Handelspolitik der Vereinigten Staaten von Amerika, p. 76 et passim.

⁵⁸ In that respect, the DSU (supra n. 28) constitutes a good compromise between outright retaliation for breach of an international trade agreement and non-availability of practically effective sanctions at all, as is the case for international intellectual property conventions.

2.2 Filling the Legitimacy Gap

2.2.1 The Nature of the Legitimacy Gap

As practically effective and political useful as the trade negotiations approach to international intellectual property protection was, it left a legitimacy gap underneath the legal obligations entered into by the parties to the TRIPS Agreement. This gap is created by the very purpose of imposing on WTO Members an obligation to establish with respect to their domestic markets a fully-fledged, internationally agreed upon system of intellectual property protection as a pre-requisite to participation in potentially worldwide international trade. Such obligation implies, indeed, that instead of being able to set the incentives of exclusivity and their limits within the national innovation system in the way that becomes their domestic economy best, States must, as a matter of obtaining access to international trade, accept a system of property rights whose objectives and operation, boundaries and effects are determined externally and by foreign interests. It is, therefore, no longer or at least not alone the insight into the sound inner rationale of intellectual property and of its limits which informs its design, but that of a forced trade reciprocity. Under this rule, the scope of the available exclusive rights—or rather its commercial potential—must match the volume of trade concessions made in terms of lower customs or larger quotas. The concomitant risks of democratic deficits and the neglect of the systemic weaknesses inherent in such a territorially global "one size fits all-approach" are obvious enough.

What is more, the legitimacy gap extends even to the very basis of international trade law. The far-reaching limitation of national sovereignty regarding the regulation of Members' internal markets constitutes quite an inroad into the fundamental principle underlying traditional international trade, which is the concept of comparative advantage. Not only is it by reference to States that, under this principle, the costs and benefits of international trade are determined. It is also the States, which by the organization of their markets—rather than simply by their natural economic conditions or "factors"—determine or may determine what their comparative advantages or disadvantages are or should be. ⁵⁹ This is also what is assumed for the operation of institutional competition to work in general. ⁶⁰ True,

⁵⁹ See M. Trebilcock, R. Howse & A. Eliason (2013), The Regulation of International Trade, pp. 4 et seq.; A. Lowenfeld (2002), International Economic Law, pp. 7 et seq.; St. Oeter (2010), in M. Hilf & St. Oeter (Eds.), WTO-Recht, § 1, no. 5 with references; WTO (2009), World Trade Report 2008 – Trade in a Globalizing World, p. 70 (with p. 65, Box 8).

⁶⁰ Pro-innovation rankings of States mirror such institutional competition. As regards intellectual property, see Taylor Wessing Global Intellectual Property Indices, 4th Report 2013.

such competition implies that States may and must adapt the regulation of their internal markets so as to make them attract the desired supply of goods, services, technology or investment. But it also implies that States determine their demand themselves, and how they wish to see it met. More generally, the concept of comparative advantage assumes that States may position themselves on international markets by designing the market they control, i.e. their domestic market, as they see fit. Therefore, grounds to worry result not only from the fact that TRIPS prescribes for all States a specific configuration of their domestic system of intellectual property protection, which may not fit the true or perceived national needs of some Members or of a group of them, e.g. developing countries. Rather, what causes concern is the systemic conditioning of Members' domestic markets for international trade, more particularly for the satisfaction of other States' trade interests and for their (multi-) national firms' private interests of market control. It is, therefore, a general concern, not only a country-specific or issue-specific concern.

⁶¹ The "development issue" is outside the scope of this paper. Its assessment varies considerably over time and with the countries considered or the perspective of the authors, see for early assessments A.M. Pacon (1996), What will TRIPS Do for Developing Countries?, in F.-K. Beier & G. Schricker (Eds.), From GATT to TRIPS, p. 329 et passim; UNCTAD (1997), The TRIPS Agreement and Developing Countries, UNCTAD/ITE/1 of May 1997; recently R.M. Olwan (2013), Intellectual Property and Development: Theory and Practice, passim; P.K. Yu (2011), Are Developing Countries Playing a Better Game?, 16 UCLA J. Int'l L. & Foreign Aff. 2011, 311; D. Gervais (2009), (Re)Implementing the Agreement on Trade-Related Aspects of Intellectual Property Rights to Foster Innovation, 12 J. W. Intell. Prop. 2009, 348; for excellent analytical surveys see A. Peukert (2014), Immaterialgüterrecht und Entwicklung, in Ph. Dann et al. (Eds.), Entwicklung und Recht: Eine systematische Einführung, p. 189; S. Sell (2011), Everything Old is New Again: The Development Agenda Then and Now, 3 WIPO J. 2011, 17; for a review of literature see E. Hassan et al. (2010), Intellectual Property and Developing Countries. See also infra n. 155.

⁶² For the combined influence a few developed countries and multinational enterprises exercise on international trade regulation, in particular on TRIPS see supra n. 44; P. Drahos (2002), Developing Countries and International Intellectual Property Standard-Setting, 5 J. W. Intell. Prop. 2002, 765; P. Drahos (2004), The Regulation of Public Goods, 7 J. Int'l Econ. L. 2004, 321.

⁶³ Which, of course, it also frequently is, the most prominent example being presented by the problems of access to affordable medicines. While the many specific issues (others are climate change, energy supply, etc.) cannot be dealt with here (as to access to essential medicines see the contributions by F. Abott et al. (2005), in K. Maskus & J. Reichman (Eds.), International Public Goods and Transfer of Technology Under a Globalized Intellectual Property Regime, Part III, Sect. 1; O. Aginam et al. (2013), The Global Governance of the HIV/AIDS – Intellectual Property and Access to Essential Medicines; G. Dutfield (2008), Delivering Drugs to the Poor: Will the TRIPS Amendment Help?, 34 Am. J.L. & Med. 2008, 1; D. Matthews (2011), When Framing Meets Law: Using Human Rights as a Practical Instrument to Facilitate Access to Medicines in Developing Countries, 3 WIPO J. 2011, 113), it may be noted that they tend to divert attention from the general problem as they may be tackled, albeit not solved, in their own terms either in TRIPS (see the "Doha Waiver" resulting in Article 31^{bis} TRIPS, for details UNCTAD–ICTSD (2005), Resource Book on TRIPS and Development, pp. 44 et seq., 489 et seq.; J. Watal (2011), From Punta del Este to Doha and Beyond: Lessons from the TRIPS Negotiation Processes, 3 WIPO J. 2011, 24, 28 et passim; K. Paas (2009), Compulsory Licensing under the TRIPS

In the case of intellectual property protection, the legitimacy problem becomes all the more apparent as the establishment and configuration of a system of private property rights not only constitutes a framework regulation for innovative markets serving specific industrial policy goals or a mix of social and industrial policy goals. 64 and, in this respect, compares with any other non-interventionist market regulation. Rather, the legitimacy problem is exacerbated by the fact that intellectual property protection presupposes a systemic decision to be taken as regards the organization of the market, to which it will apply. The reason is that as a system awarding exclusive rights, it will work as expected only if and to the extent that the market operates under—adequate!—conditions of competition. 65 It is also only then that one may expect that, as a rule, the satisfaction of private interests will concur as desired with that of the public interest. When that will be the case or can be made to be the case is controversial enough, ⁶⁶ but not the point here. Rather it is again that a fundamental policy decision on the constitution of Members' domestic markets and on the ways to attain their interests has not only been subject to a—more or less satisfactory—trade bargain, ⁶⁷ but has been made a condition of

Agreement: A Cruel Taunt for Developing Countries?, 31 E.I.P.R. 2009, 609; J. Wakely (2011), Compulsory Licensing under TRIPS: An Effective Tool to Increase Access to Medicines in Developing and Least Developed Countries?, 33 E.I.P.R. 2011, 299; J. Wakely (2011), The Impact of External Factors on the Effectiveness of Compulsory Licensing as a Means of Increasing Access to Medicines in Developing Countries, 33 E.I.P.R. 2011, 756; M. Trebilcock, R. Howse & A. Eliason (2013), The Regulation of International Trade, pp. 546 et seq.) or on the national level by using TRIPS "flexibilities" (see infra section "TRIPS Flexibilities"). As regards, e.g. "evergreening" of patents see Novartis AG v. Union of India, 6 SCC 2013, 1 = GRUR Int. 2013, 902.

⁶⁴ See H. Ullrich (2012), Intellectual Property: Exclusive Rights for a Purpose – the Case of Technology Protection by Patents and Copyright, in K. Klafkowska – Wasniowska et al. (Eds.), Problemy Polskiego i Europejskiego Prawa Priwatnego (Contributions in Honour of M. Kepinski); for the factors determining the necessary and necessarily country-specific policy mix see M. Perez Pugatch (2011), Intellectual Property Policy Making in the 21st Century, 3 WIPO J. 2011, 71.

⁶⁵ This is not a matter of preventing intellectual property-related restrictions of competition, but of establishing and maintaining competitively functioning markets as a systemic pre-requisite to the satisfactory operation of property rights as a means of allocating resources for efficient, welfare-enhancing use, see H. Ullrich (2011), Intellectual Property, Access to Information, and Antitrust: Harmony, Disharmony and International Harmonization in R. Dreyfuss et al. (Eds.), Expanding the Boundaries of Intellectual Property, pp. 365, 371 et seq.

⁶⁶ Even leaving aside the fundamental problem of whether, e.g. patents help to stimulate or only to defend innovation, any fine-tuning of the systemic operation of protection by exclusive rights poses enough questions, see only D. Burk & M. Lemley (2009), Policy Levers in Patent Law, 89 Va. L. Rev. 2009, 1575; M. Carroll (2010), American University, WCL Research Paper No. 2010–07; G. Van Overwalle (2011), Policy Levers Tailoring Patent Law to Biotechnology: Comparing U.S. and European Approaches, 1 U.Cal. Irvine L. Rev. 2011, 435. For the related debate on TRIPS flexibilities see infra section "TRIPS Flexibilities".

⁶⁷ For the dissatisfaction with the "bargain" struck see references infra n. 81, 137. The sociopolitical dimensions of the "trade approach" are outside the scope of this paper, see P. Drahos & J. Braithwaite (2002), Information Feudalism – Who Owns the Knowledge Economy?, pp. 11 et seq., 187 et passim.

entry into the WTO-free trade system altogether. Clearly also, the way the WTO/GATT consensus has been brought about contributed to deepening the legitimacy gap.

2.2.2 Economic Justification

TRIPS' legitimacy gap is not merely a matter of abstract principles of law. It triggers continuing political discontent, exacerbates economic argument about TRIPS adequacy for all of its Members, and is at the origin of calls for a legal reinterpretation of the Agreement. As far as the economics of TRIPS are concerned more particularly, the theoretical analysis confirms that the establishment of equal standards of intellectual property protection for all States—essentially those of developed countries—entails a risk of imposing on Members' national markets a system of protection, which does not correspond to their economic structure, and, therefore, might tend to frustrate these States' comparative advantages in international trade. This, at least, is the teaching to be learnt from a combined reading of general trade theory and of the theory of intellectual property, in particular patent theory. 68 Under general trade theory, differences in the economic development of States, such as high technological potential for innovation on the one hand, and, on the other, good follower qualities and/or medium or low technological capacities, do in themselves represent comparative advantages. Under patent theory, ⁶⁹ it is generally recognized⁷⁰ that the definition of the scope and the term of protection, including that of the exclusions and exceptions, ⁷¹ is a matter of trade-offs. These have to be struck, first, horizontally between setting a sufficient incentive for

⁶⁸ For the following see M. Trebilcock, R. Howse & A. Eliason (2013), The Regulation of International Trade, p. 514 et passim; J. Drexl (2015), The Concept of Trade-Relatedness of Intellectual Property Rights in Times of Post-TRIPS Bilateralism, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 53 (this volume) (at Sect. 4).

⁶⁹ Similar lines of argument apply to all incentive-oriented forms of intellectual property following an innovation rationale, such as the protection of designs, of plant varieties and software and databases (the latter with an inappropriate copyright twist). As regards trademarks (incentive to invest in distribution), the analyses needs modification (no term of protection), and so does the analysis of general copyright. However, in essence, the problem of over-protection v. underprotection with the ensuing trade off- issues exists for all intellectual property rights, see for a general presentation K. Maskus (2000), Intellectual Property Rights in the Economy, p. 28 et passim; for an excellent summary P. David (1993), Intellectual Property Institutions and the Panda's Thumb: Patents, Copyrights, and Trade Secrets in Economic Theory and History, in M. Wallerstein (Ed.), Global Dimensions of Intellectual Property Rights in Science and Technology, p. 19.

⁷⁰ See in particular S. Scotchmer (2004), Innovation and Incentives, p. 97 et passim.

⁷¹ See L. Bently (2011), Exclusions from Patentability and Exceptions to Patentee's Rights: Taking Exceptions Seriously, 64 Current Legal Problems 2011, 315; and the special studies in WIPO (2010), Standing Committee on the Law of Patents, Exclusions from Patentability and Exceptions and Limitations to Patentee's Rights, SCP/15/3, Annexes I to VI.

innovation in the form of an exclusivity of exploitation on the one hand, and, on the other, ensuring effective dissemination of the innovation by competition. Second, a trade-off has to be made also vertically between providing such incentives for innovation in general and enabling followers to use and actually to exploit all opportunities for desirable (or desired) sequential innovation by improvement, variation, etc. The criteria for striking these trade-offs are derived from the nature of the technologies and the structure of the industries to be promoted, and, more generally, from the state of an economy, its science base, infrastructure, etc. Not having the right trade-off will mean that opportunities for innovation or for competition are missed, i.e. a loss of welfare on the national level, and a loss of comparative advantage on the international level. Given that Members' economies do differ, a globally equal system of intellectual property protection, therefore, means that it will produce winners and losers. This stands in contrast to conventional (static) trade theory, which suggests that more trade will produce direct welfare gains both globally and domestically for the trading partners.

In reality, the problems posed by TRIPS are more complex and defy straightforward solutions.⁷⁵ The Agreement does allow some differentiation of protection,⁷⁶ which Members may, in fact must use in conformity with the state of their economies, their specific needs and policies or else they will forego the potential benefits offered by TRIPS.⁷⁷ Even if they can and do use these "flexibilities", the

⁷²For the possibilities and systemic limits of "tailoring" intellectual property protection, see references supra n. 66. Clearly, the costs of a misfit are magnified, where a system of protection misses not only the characteristics of a technology or the needs of an industry, but the structure of a national economy altogether.

⁷³ According to M. Finger (2007), Implementation and Imbalance. Dealing with Hangover from the Uruguay Round, 23 Oxford Rev. Econ. Pol'y 2007, 440, 443, for many developing countries "the new obligation to pay for intellectual property that the old rules allowed them to use without paying is several times larger than the gain they will enjoy from the entire Uruguay Round of trade liberalization". A. Peukert (2014), Immaterialgüterrecht und Entwicklung, in Ph. Dann et al. (Eds.), Entwicklung und Recht: Eine systematische Einführung, p. 189 concludes that, in the absence of positive effects on domestic development – e.g. in least developed countries –, the better choice is not to introduce a system of protection at all, since this would allow avoiding the social costs that come with it in any case.

⁷⁴ See M. Trebilcock, R. Howse & A. Eliason (2013), The Regulation of International Trade, p. 58. ⁷⁵ Such as that proposed by A. Deardorff (1990), Should Patent Protection Be Extended to All Countries?, 13 World Econ. 1990, 497, who questions that extending intellectual property protection to all countries would necessarily enhance global welfare. In essence, his argument is that the incentive gains in poor developing countries are not large enough to outweigh the losses from forgone competition by imitation/cheaper supply of consumers. Basically, this is a tradeoff-argument similar to that underlying patent protection in general. The obvious problem again is to empirically determine in advance which countries qualify for what, given that there must be a limit, that economies change, and that intellectual property systems need time to be established or reformed, and that they do unfold their effects only over time.

⁷⁶ Commonly referred to as "TRIPS flexibilities", see infra section "TRIPS Flexibilities".

 $^{^{77}}$ See K. Maskus (2000), Intellectual Property Rights in the Economy, p. 143 et passim, 181 et passim.

benefits of a system of intellectual property protection will not accrue to them by themselves and immediately. Rather, an effective intellectual property system needs to be embedded in a propitious environment. ⁷⁸ Above all, it presupposes investment in invention and creation, for which financial and industrial resources have to be built up. Intellectual property does not produce innovation, but only protects it, once it has been made. This means that Members have to make an extra effort before they can benefit from the introduction of an intellectual property system or from its adaptation to TRIPS, and this benefit will accrue only with a time lag. All this may be said to be simply the dynamic aspect of TRIPS. However, it affects the bargain made in two respects. For one thing, given the uncertainties of economic and technological development, the outcome of the bargain is speculative at least as regards increases in "homemade", i.e. self-produced domestic welfare. At any rate, not all Members will succeed, and even if they succeed, they will do so in different degrees.⁷⁹ For another, those Members, which, due to their strength in innovation already enjoy a comparative advantage and thus benefit from an extension of enhanced intellectual property protection to other Members' territories, will do so immediately.⁸⁰ This, indeed, is what the political bargain was all about.

2.2.3 Re-reading TRIPS

Whether this political bargain has been economically satisfactory is another controversial matter. Whatever the answer, it will hardly help overcoming the legitimacy problem. Represented this problem precisely is that bartering access to

⁷⁸ In terms of a well-functioning educational systems, a sufficient science base, an appropriate infrastructure and adequate, possibly also compensatory market regulation, see only K. Maskus (2000), Intellectual Property Rights in the Economy, p. 199 et passim.

⁷⁹The divide between some Asian and Latin American countries, and, e.g. African countries, immediately comes to mind, see for empirical estimates K. Maskus (2000), Intellectual Property Rights in the Economy, pp. 186 et seq.; P.K. Yu (2013), The Rise of China and Other Middle Intellectual Property Powers, Drake Univ. School of Law, Occasional Papers in Intellectual Property Law No. 8, passim; generally WTO (2014), World Trade Report, p. 52 et passim.

⁸⁰ See for rent transfers mainly to the U.S.A., to a lesser, still considerable degree to Germany K. Maskus (2000), Intellectual Property Rights in the Economy, pp. 181 et seq.

⁸¹ Much of the dissatisfaction of developing countries led them to push the "Doha Development Agenda" within the current round of trade negotiations, see S. Hörmann (2010), in M. Hilf & St. Oeter (Eds.), WTO-Recht, § 32 nos. 2 et passim.

⁸² Contra J. Straus (2012), A Marriage of Convenience: World Economy and Intellectual Property from 1990 to 2012, 40 AIPLA Qu. J. 2012, 633. The author finds growth rates to be positive for 1999 to 2011 across all countries (from which level?), but does not correlate them with intellectual property statistics, presumably precisely because he assumes no direct interdependency between the level of intellectual property protection and other WTO-advantages (see ibid., pp. 664 et seq.). Although, in this respect his position is not quite clear, in his view the "marriage of convenience" seems to consist of accepting a sub-optimal intellectual property regime in exchange for some other benefits, so a sacrifice to be compensated by other gains. Yet Straus also notes that "ironically, improving the enforcement of IP rights in the developing world and hence increasing the attractiveness of the location, may (and probably has) adversely affected the national

foreign markets, measured mainly in sales volumes, against commitments of domestic market organization, in particular of long-term institution building, means trading away sovereign self-determination over the structure and operation of a State's home economy. That, however, is the primary basis for the satisfaction of a nation's needs and the promotion of its welfare, ⁸³ rather than merely the source of a comparative advantage or disadvantage in international trade. Even in the latter respect, self-determination over the nature of a comparative advantage would seem to be the natural rule of trade between States.

TRIPS Flexibilities

Given that the TRIPS Agreement seems to give a different answer to the question as to who ought to determine which intellectual property regime is best for a State, the question may be asked, whether its principles and rules may or must be read more in an inward-looking or more in an outward-looking perspective, meaning more with a view to the interest of domestic development or more with a view to the interest of international trade, i.e. the interests of foreign traders. A first answer to this question was given early on by authors, who pointed out that TRIPS does, indeed, provide room not only for "more extensive protection" (Article 1(1) TRIPS) or, as any legal instrument, for interpretation, but also for different implementation. These "flexibilities" result *inter alia* from the fact that the various categories of

economies of the developed world" (p. 665). These are no comforting conclusions. After all, one would tend to expect optimizing the intellectual property system everywhere would best reflect comparative advantages and thus maximize both global and local welfare.

⁸³ See M. Trebilcock, R. Howse & A. Eliason (2013), The Regulation of International Trade, p. 7. The contribution of foreign trade to GDP varies considerably from country to country (USA: ~ 25 %: D. ~ 75 %; EU: ~ 33 %), see Bundesministerium für Wirtschaft (2013), Fakten zum deutschen Außenhandel 2012. It is heavily influenced by trade in intermediate products/global value chains, see infra n. 134, 136.

⁸⁴ As all textbooks remind us, it is firms, not States, which trade (A. Lowenfeld (2002), International Economic Law, p. 7; M. Trebilcock, R. Howse & A. Eliason (2013), The Regulation of International Trade, p. 4). Indeed, in the case of TRIPS, it is industry, which pushed for its benefits, see references supra n. 44

⁸⁵ See UNCTAD (1997), The TRIPS Agreement and Developing Countries, p. 32 et passim (nos. 123 et passim); J. Reichman (1996–1997), From Free Riders to Fair Followers: Global Competition Under the TRIPS Agreement, 29 NYU J. Int.'l L.Pol. 27 et seq. (1997); J. Reichmann & D. Lange (1998), Bargaining Around the TRIPS Agreement: The Case for Ongoing Public-Private Initiatives to Facilitate Worldwide Intellectual Property Transactions, 9 Duke J. Comp. & Int'l. L., 21 et seq. (1998).

⁸⁶ For instance, in addition to copyright protection of databases, the EU has introduced a sui generis form of protection (Articles 7 et seq. Directive 96/9/EC of 11 March 1996 on the legal protection of databases), which pursuant to Article 11 of the Directive will be extended to non-EU nationals/residents on the basis of reciprocity only. For a discussion of the rule's compatibility with TRIPS see G. Dinwoodie & R. Dreyfuss (2012), A Neofederalist Vision of TRIPS: Building a Resilient International Intellectual Property System, pp. 92 et seq.

intellectual property have been covered in different detail, that many of the concepts of protection, and in particular the exceptions from the exclusivity, ⁸⁷ are held in general terms ⁸⁸ or are not covered in their substance, ⁸⁹ and that the interrelationship between, on the one hand, the "objectives" (Article 7) and the "principles" (Article 8), and, on the other, the rules on the availability, scope and exercise of intellectual property rights (Part II, Articles 9–39) creates additional policy space. ⁹⁰

Re-balancing

Originally, these "flexibilities" or "policy spaces" for TRIPS implementation on the national level were explored with a view to allow developing countries to adapt their intellectual property regimes to TRIPS requirements while catering as much as possible to their specific economic and societal needs. More recently, however, they also have been made the starting point for a broader, systematic understanding of the TRIPS Agreement as a basic and principled instrument of international intellectual property protection. The proponents of such an approach do not look at TRIPS from a (private) property perspective or, more precisely, from an exclusivity perspective, which is the trade perspective, nor from any specific interest

⁸⁷ See Articles 13, 17, 26(2), 30 TRIPS. As regards more particularly Article 17, see Ch. Geiger, J. Griffiths & R. Hilty (2008), Declaration: A Balanced Interpretation of the "Three-Step Test" in Copyright Law, 39 IIC 2008, 707; A. Kur (2011), Limitations and exceptions under the three-step test – how much room to walk the middle ground?, in A. Kur (Ed.), Intellectual Property Rights in a Fair World Trade System – Proposals for Reform, pp. 208, 222 et passim.

⁸⁸ See references supra n. 85; M. Lamping (2014), Declaration on Patent Protection: Regulatory Sovereignty under TRIPS, 45 IIC 2014, 679.

⁸⁹ E.g., the principle of exhaustion, which Article 6 exempts from the dispute settlement mechanism, if not from TRIPS altogether (see UNCTAD–ICTSD (2005), Resource Book on TRIPS and Development, pp. 104 et seq.) or the matter of compulsory licensing of patents, which Article 31 essentially subjects to procedural constraints only. For the different national approaches, see H. Ullrich (2014), Compulsory Licenses Under Patent Law: European Concepts, in W. Kaal et al. (Eds.), Festschrift Chr. Kirchner, p. 399 and the contributions in R.M. Hilty & K.-Ch. Liu (2015), Compulsory Licensing – Practical Experiences and Ways Forward, passim.

⁹⁰ See A. Slade (2011), Articles 7 and 8 of the TRIPS Agreement: A Force for Convergence with the International IP System, 14 J.W. Intell. Prop. 2011, 413; H. Grosse Ruse-Kahn (2011), Assessing the Need for a General Public Interest Exception in the TRIPS Agreement, in A. Kur (Ed.), Intellectual Property Rights in a Fair World Trade System – Proposals for Reform, p. 167 et passim.

⁹¹ See in particular A. Kur et al. (2011), Intellectual Property Rights in a Fair World Trade System – Proposals for Reform, p. 455 et passim, 526 et passim; G. Dinwoodie & R. Dreyfuss (2012), A Neofederalist Vision of TRIPS: Building a Resilient International Intellectual Property System, passim. There are, of course, many other suggestions to review TRIPS, such as to make it at least work more "objectively", see inter alia F. Abbott (2005), Toward a New Era of Objective Assessment in the Field of TRIPS and Variable Geometry for the Preservation of Multilateralism, 8 J. Int'l Econ. L. 2005, 77. However, the purpose of this paper is too modest to examine all of them.

perspective, and they do not see the TRIPS Agreement as providing for a definite or static regime for international intellectual property protection. Rather, they analyze it from inside the system emphasizing that, in order to function according to its purpose, intellectual property protection must be established on the basis of complex trade-offs between the interests of all owners, actual or potential, and between their interests and those of other market actors, competitors, users and/or consumers. Moreover, they assess TRIPS as a dynamic regime, which, as any intellectual property system, evolves over time or needs to be modified in conformity with economic, technological or societal change. Therefore, the advocates of such a "balancing approach" also put TRIPS in context with respect not only to other international conventions on intellectual property, but to overarching legal principles, such as human rights or countervailing or concurrent public policy concerns, such as access to affordable medicines or food, the control of climate change, or of the exploitation of biodiversity, etc.

This paper is not the place to discuss these balancing approaches. The point to make here is that while their proponents come to different conclusions—*Dinwoodie* and *Dreyfuss* wish to stabilize TRIPS by broadening the basis and the concepts of its regime ⁹⁷ whereas *Kur* and her co-authors suggest specific reforms ⁹⁸—their common concern is to re-conceptualize TRIPS as a regime of intellectual property rights, which all Members can accept internally by implementing it in a way that, as a regulation of their domestic markets, it accommodates their varying needs. ⁹⁹ In

⁹² Thus, G. Dinwoodie & R. Dreyfuss (2012), A Neofederalist Vision of TRIPS: Building a Resilient International Intellectual Property System, p. 5 et passim, object to a widely held view of TRIPS as a "code" of international intellectual property protection.

⁹³ It is, indeed, not simply "the owner v. the others", see ibid., p. 9 referring to the "vertical dilemma" of sequential innovation/creation (see also supra n. 70).

⁹⁴ See also references supra n. 69.

⁹⁵G. Dinwoodie & R. Dreyfuss (2012), A Neofederalist Vision of TRIPS: Building a Resilient International Intellectual Property System, p. 10 et passim; see also infra Sect. 2.3.3.

⁹⁶ See A. Kur et al. (2011), Intellectual Property Rights in a Fair World Trade System – Proposals for Reform, pp. 535 et seq. (amendment Article 8(1), p. 464); G. Dinwoodie & R. Dreyfuss (2012), A Neofederalist Vision of TRIPS: Building a Resilient International Intellectual Property System, pp. 9 et seq., 111 et seq., 152 et seq. For the increasing emphasis in literature on respecting other public interests see M. Lewin (2011), The pendulum keeps swinging – present discussions on and around the TRIPS Agreement in A. Kur (Ed.), Intellectual Property Rights in a Fair World Trade System – Proposals for Reform, p. 3, 25 et passim.

⁹⁷ Thus, G. Dinwoodie & R. Dreyfuss (2012), A Neofederalist Vision of TRIPS: Building a Resilient International Intellectual Property System, p. 145, et passim, 174 et passim, propose some form of integrated international law-making that would associate WTO, WIPO and other international organizations such as WHO, and they want to see an "international acquis" of common principles of intellectual property to be recognized.

⁹⁸ See the amendments to TRIPS proposed by A. Kur et al. (2011), Intellectual Property Rights in a Fair World Trade System – Proposals for Reform, p. 455 et passim.

⁹⁹ G. Dinwoodie & R. Dreyfuss (2012), A Neofederalist Vision of TRIPS: Building a Resilient International Intellectual Property System, pp. 115 et seq., also advocate for more respect of State self-determination and of the (democratic) particularities of national law-making.

short, their concern is with restoring the internal legitimacy of national protection, which has been affected by the TRIPS pressure for international protection. If generally accepted, the focus would shift again from trade-relatedness to the general legal principles of intellectual property protection. ¹⁰⁰

2.2.4 Acceptance of TRIPS

Clearly, calling for more concern for the internal policy interests of WTO Members expresses again a discontent with the TRIPS approach, which is widely shared in academic circles and by civil society. In a way, this corresponds to national courts' reluctance to accept TRIPS in terms other than that of a trade regime. At least the European Court of Justice, while ensuring compliance of Member States and EU law with TRIPS, refrains from giving its rules direct effect. Apparently, the WTO dispute settlement mechanism, though recognized as a welcome step towards juridification of trade rules, is not handled or suited to be handled with sufficient regard for the complexities of national intellectual property systems and their policy implications. Retaliation is hailed only when it permits suspending TRIPS obligations and thus to open up room again for national intellectual property policy. Therefore, it comes as quite a surprise that TRIPS principles and rules are elevated to the level of a benchmark of legitimacy when it comes to assessing

¹⁰⁰ See the plea by G. Dinwoodie & R. Dreyfuss (2012), A Neofederalist Vision of TRIPS: Building a Resilient International Intellectual Property System p. 49 et passim, for a more subtle or circumspect review of the compatibility of national law with TRIPS, if not for some "judicial self-restraint".

¹⁰¹ See ECJ, Daiichi Sankyo and Sanofi-Aventis Deutschland, C-414/11, EU:C:2013:520, nos. 40 et seq., overriding ECJ, Merck Genéricos Produtos Farmacêuticos, C-431/05, EU:C:2007:496, nos. 41 et seq., 47; ECJ, Schieving-Nijstad and others, C-89/99, EU:C:2001:438, nos. 51 et seq. with references to prior decisions. For national case law see conclusions Advocate General Cruz Villalon of 31 January 2013 in case ECJ, Daiichi Sankyo and Sanofi-Aventis Deutschland, C-414/11, EU:C:2013:520, nos. 83 et seq. See also L. Ankersmith (2014), The scope of the Common Commercial Policy after Lisbon: The Daiichi Sankyo and Conditional Access Services Grand Chamber Judgments, 41 Legal Iss. Econ. Integr. 2014, 193; G. Tritton (2008), Intellectual Property in Europe, sub. 1–071.

¹⁰²See G. Dinwoodie & R. Dreyfuss (2012), A Neofederalist Vision of TRIPS: Building a Resilient International Intellectual Property System, p. 49 et passim; contra: J. Pauwelyn (2010), The Dog That Barked But Didn't Bite: 15 Years of Intellectual Property Disputes at the WTO, 1 J. Int'l. Dispute Settlement 2010, 389.

¹⁰³ See H. Grosse Ruse-Khan (2008), A Pirate of the Caribbean? The Attraction of Suspending TRIPS Obligations, 11 J. Int'l Econ. L. 2008, 313; F. Abbott (2009), Cross Retaliation in TRIPS: Options for Developing Countries, ICTSD Issue Paper No. 8, passim; Ph. Coppens & H. Culot (2015), La Suspension de l'Accord ADPIC comme sanction de la violation des règles de l'OMC, in A. Autenne et al. (Eds.), Droit, Économie et Valeurs, Hommage à B. Remiche, p. 719.

bilateral or regional trade agreements providing for their own rules of international intellectual property protection. ¹⁰⁴

The EU and the USA have concluded quite a number of such agreements, mainly but not exclusively with emerging and/or developing countries and mostly, but not exclusively ¹⁰⁵ after the conclusion of the TRIPS Agreement. ¹⁰⁶ To the extent that such agreements provide for "more extensive" protection (Article 1(1) 2nd sentence TRIPS), ¹⁰⁷ so-called TRIPS-plus protection, they do so frequently not only with a view to cover subject-matter not yet within TRIPS, but also to expand the scope of the exclusivity conferred by TRIPS rights either in substance or in time, or to further restrict the limitations of protection, or also to make enforcement more effective. ¹⁰⁸ Therefore, they tend to reduce more or less substantially TRIPS

¹⁰⁴ See H. Grosse Ruse-Khan et al. (2013), Principles for Intellectual Property Provisions in Bilateral and Regional Agreements, 44 IIC 2013, 878, with introduction by H. Grosse Ruse-Khan, ibid. p. 873 and complementary contributions by several authors.

¹⁰⁵ See supra n. 55 regarding NAFTA.

¹⁰⁶ See generally Huawein He (2010), The Development of Free Trade Agreements and International Protection of Intellectual Property Rights in the WTO Era – New Bilateralism and Its Future, 41 IIC 2010, 253; for USA agreements M. Trebilcock, R. Howse & A. Eliason (2013), The Regulation of International Trade, pp. 561 et seq. (with a systematic overview in table 14.2); G. Krikorian & D. Szymkowiak (2007), Intellectual Property Rights in the Making: The Evolution of Intellectual Property Provisions in USA Free Trade Agreements and Access to Medicines, 10 J. W. Intell. Prop. 2007, 388; H. Rangel-Ortiz (2014), Patent and Trademark Rights in Commercial Agreements entered by the United States with Latin American Nations in the First Decade of the Twenty-first Century: Divide et Vinces, in G. Ghidini et al. (Eds.), TRIPS and Developing Countries, p. 72. For the EU see B. Melo Aranjo (2013), Intellectual Property and the EU's Deep Trade Agenda, 16 J. Int'l. Econ. L. 2013, 439; M. Santa Cruz (2007), Intellectual Property Provisions in European Union Trade Agreements, ICTSD Issue Paper, p. 20; D. Matthews (2010), The Lisbon Treaty, Trade Agreements and the Enforcement of Intellectual Property Rights, 32 E.I.P.R. 2010, 104, and the contributions in J. Drexl et al. (2014), EU Bilateral Trade Agreements and Intellectual Property: For Better or Worse.

¹⁰⁷ Article 1(1, 2nd sentence) TRIPS addresses "more extensive protection" on the national level only, so as a matter of national intellectual property protection for the domestic markets and its needs. By contrast, the bilateral agreements raise issues as to their impact on TRIPS and, more generally, on international standards of intellectual property protection, see J.F. Morin (2009), Multilateralizing TRIPS-Plus Agreements: Is the USA-Strategy a Failure?, 12 J. W. Intell. Prop. 2009, 175; P. Roffe (2014), Intellectual Property Chapters in Free Trade Agreements: Their Significance and Systematic Implications, in J. Drexl et al. (Eds.), EU Bilateral Trade Agreements and Intellectual Property: For Better or Worse, pp. 10, 28 et seq.; H. Aleman (2014), Impact of TRIPS-Plus Obligations in Economic Partnership- and Free Trade Agreements in International IP Law, in J. Drexl et al. (Eds.), EU Bilateral Trade Agreements and Intellectual Property: For Better or Worse, p. 61.

¹⁰⁸ See supra n. 106. As regards enforcement rules, see Th. Jaeger (2014), IP-Enforcement Provisions in EU Economic Partnership Agreements, in J. Drexl et al. (Eds.), EU Bilateral Trade Agreements and Intellectual Property: For Better or Worse, p. 189; X. Seuba (2013), Checks and Balances in the Intellectual Property Enforcement Field: Reconstructing EU Trade Agreements, in Ch. Geiger (Ed.), Constructing European Intellectual Property, p. 409, stressing that the FTAs of the EU provide for enforcement rules, which are even stricter than those of the EU Directive on the enforcement of intellectual property rights.

flexibilities, typically in accordance with the concepts adhered to domestically by the EU and the USA respectively. The EU and the USA thus "export" their domestic intellectual property regimes to the "partner" States. This they do based on a bilateral trade leverage, which likely, albeit not necessarily is stronger than the leverage power they can exercise in multilateral negotiations, where more (defensive) coalition-building is possible and more willingness to compromise is required for obtaining concessions. This way, the rules of the multilateral TRIPS Agreement, in particular its flexibilities, become a point of reference, if not a (legal?) benchmark. ¹⁰⁹

There is, however, a systemic contradiction between the political purpose and the objective of perfecting TRIPS by complementary or additional TRIPS-plus rules on the one hand, and, on the other, the desire or the need to maintain broad flexibility of intellectual property regulation in the interest of domestic industrial or development policy. At the root of this contradiction is a misunderstanding of the TRIPS Agreement as if it were mainly concerned with two matters: with defense against counterfeiting or piracy, and with control of export markets, meaning that its rationale runs along a direct line from exporting to importing countries, in particular from developed to developing countries. In reality, TRIPS, like the entire WTO/GATT 94 arrangement, is the framework for a global trade strategy in defense not only against emerging economies, but also in search of advantages as between the developed economies, with the bilateral or regional trade agreements being only an extension of this strategy (and evidence of how and how far it is actually followed). Rather than seeking to establish some sort of a controlled

¹⁰⁹ See H. Grosse Ruse-Khan et al. (2013), Principles for Intellectual Property Protection in Bilateral and Regional Agreements, 44 IIC 2013, 878, sub 1.3, 2.3 (no. 21); generally A. Kur & H. Grosse Ruse-Khan (2011), Enough is Enough – The Notion of Binding Ceilings in International Intellectual Property Protection, in A. Kur (Ed.), Intellectual Property Rights in a Fair World Trade System – Proposals for Reform, pp. 359, 375 et seq.; more pro-active than the former S. Frankel (2009), Challenging TRIPS-Agreements: The Potential Utility of Non-Violation Disputes, 12 J. Int'l. Econ. L. 2009, 1023; C. Correa (2014), The Impact of Economic Partnership Agreements on WTO Law, in J. Drexl et al. (Eds.), EU Bilateral Trade Agreements and Intellectual Property: For Better or Worse, p. 87.

¹¹⁰ That has also been this author's perspective, see H. Ullrich (1996), GATT, Industrial Property Protection, Fair Trade and Development, in F.-K. Beier & G. Schricker (Eds.), From GATT to TRIPS, p. 127.

¹¹¹ Witness the fight over geographical indications (dear to the EU), over the protection of semiconductor chips (once dear to the USA, see supra n. 50) or over the extent of database protection (dear to the EU, see supra n. 86). More generally, it is about the concepts governing implementation of the notions of protection and its exceptions as they determine the scope of actually available exclusivities (e.g. the U.S./EU divide as regards patent protection of computer programs). It would be interesting to compare in detail the TRIPS-plus requests made by the EU and the USA respectively, and to do so against the background of the controversies over the desirability/workability on their domestic markets of the kind of protection, which the USA and the EU claim with respect to their export markets (see also infra n. 129, 130).

regulatory competition among intellectual property systems with a view to find out, which one fits which country best, ¹¹² the purpose is to create a level playing field for the internationally operating enterprises of developed WTO Members, which extends to the actually or potentially emerging markets, and which allows these firms to compete in these new or future markets between each other (and against the others) on their own conditions, preferably those of their home countries. The EU's and the USA's turn to bilateral and regional trade agreements is intended to position their industries accordingly, if necessary at the expense of their respective free trade partners. ¹¹³

2.3 In Search of a New Paradigm of International Trade Regulation

Frequent reliance by major trading powers on bilateral and regional trade agreements as a way to promote their concepts of international intellectual property protection may not be explained by opportunistic reasons alone, such as benefitting from a better leverage position, or bypassing the slow progress of the Doha Round of Multilateral Trade Negotiations. ¹¹⁴ Rather, bilateralism and regionalism result also from both the increased complexity of the many trade issues, which, due to economic globalization, are intertwined with the policies of regulating domestic markets, and from the practical and political limits of multilateralism as a mode of governance of globalized markets. ¹¹⁵

¹¹² As impressively advocated for by G. Dinwoodie & R. Dreyfuss (2012), A Neofederalist Vision of TRIPS: Building a Resilient International Intellectual Property System, pp. 5 et seq., 10 et seq., et passim. While this is the better view, it looks at reality too idealistically.

¹¹³ This is a matter of how far the USA or the EU will or may go, given that many of the agreements do follow a development perspective and, thus, include rules on development support of various kinds, see for an assessment F. Abbott (2014), Trade Costs and Shadow Benefits: EU Economic Partnership Agreements as Models for Progressive. Development of International IP Law, in J. Drexl et al. (Eds.), EU Bilateral Trade Agreements and Intellectual Property: For Better or Worse, p. 159; K. Maskus (2014), Assessing the Development Promise of IP Provisions in EU Economic Partnership Agreements, in J. Drexl et al. (Eds.), EU Bilateral Trade Agreements and Intellectual Property: For Better or Worse, p. 171. Again, as with respect to TRIPS, the question is whether the costs of asymmetrically operating intellectual property protection may be balanced against other trade benefits or whether intellectual property protection should rather be considered as a regulation of and for domestic markets.

¹¹⁴ See infra Sect. 2.3.3.

¹¹⁵ The inherent difficulties of the trade issues, which are raised by agreements such as the TBT or GATS Agreements or precisely by TRIPS (see infra Sect. 2.3.3), are compounded by the diversity of the structures and of the interests of by now 161 WTO Members, i.e. more than twice the number of the 1994 Signatory States. Among trade lawyers, therefore, opinions are split as regards the pros and cons of the current tide of preferential trade agreements of all sorts, see for the diversity of views S. Hörmann (2010), in M. Hilf & St. Oeter (Eds.), WTO-Recht, §31, passim (in particular nos. 60 et seq.), § 32, nos. 5 et passim; M. Trebilcock, R. Howse & A. Eliason (2013),

2.3.1 Changes Within the System(s) of Intellectual Property Protection

As regards intellectual property more particularly, its protection has expanded enormously over the last 20 years in terms of the overall numbers of applications and grants, ¹¹⁶ of the geographic coverage and of the substantive scope. In all fields, ¹¹⁷ but particularly so in that of patents, there is an extremely dense concentration of applications at the offices of a few major patent countries, which has brought these offices to the limits of their capacity and made them join forces with a view to reduce duplication of work. ¹¹⁸ The result is, first, some harmonization in the management and administration of the applications, and, second, probably, an enhanced capacity to receive and process even more applications. Typically, a large share of all applications comes from abroad, namely from the same major patent countries. ¹¹⁹ Also in lower middle income and low-income countries, the

The Regulation of International Trade, pp. 87 et seq., 95 et seq.; R. Senti (2013), Regionale Freihandelsabkommen, p. 231 et passim; E.-U. Petersmann (2014), Multilateral Governance Problems of the World Trading System beyond the WTO Conference at Bali, 17 J. Int'l Econ. L. 2014, 233; K. Heydon (2014), Plurilateral Agreements and Global Trade Governance: A Lesson from the OECD, 48 J.W.T. 2014, 1039.

¹¹⁶ See WIPO (2014), World Intellectual Property Indicators 2013, p. 6 (growth rate worldwide in 2011/2012 for patents 9 %, for marks 6 %, for designs 17 %, with PR China having the highest growth rates: 24 %, 16.5 %, 26.1 % respectively as compared to the USA: 7.8 %, 4 % (no designs indicated) or to the EU (EPO/OHIM) with 4 %, 3.2 %, 12 %). From 1995 to 2012 patent applications worldwide rose almost continuously from barely over a million to 2.35 million, with PR China and the USA contributing by far the most to growth (ibid. p. 46, Fig. A. 1.1.1, A 1.1.2). These numbers must be put in relation to the number of patent families, which rose from about 500.000 to about 1 Mio. during the same period (ibid. p. 63, Fig. A.4.1). For trademarks, the overall growth of application numbers (from 4.45 Mio to 6.4 Mio all classes counted) and growth rates (2004–2013) are lower (ranging from 4.2 % to 6.4 % with –5 % in 2009, thus showing a clear correlation to economic cycles), ibid., pp. 101 et seq., Fig. B. 1.1.1 (applications), B. 1.21 (registrations). As to designs, from 2004–2013 the number of applications has more than doubled (from 600,000 to over 1.2. Mio), and so has the number of registrations, with PR China heavily influencing the trend (ibid., pp. 138 et seq., Fig. C.1.1.1, C. 1.2.1).

¹¹⁷ See for trademarks and designs, where emerging countries (India, Brazil, PR China) have come to be major stakeholders, WIPO (2014), World Intellectual Property Indicators 2013, p. 102, 106 (trademarks: Fig. B.2.1.2.), 143 (designs: Fig. C.2.1.2), with China's contribution being always by far the highest.

¹¹⁸ See for the top 5 (PR China, USA, Japan, Korea, EPO) and top 20 countries (Germany, Russian Federation, India, Canada, Brazil, Australia, UK, France, etc in ranking order, with EPC countries counted separately only as to patent applications filed nationally), WIPO (2014), World Patent Indicators 2013, pp. 51 et seq., Fig. A.2.12, A.2.1.3. For the top 5, which cooperate as Five IP Offices (IP5), see IP5 Statistics Report 2013, passim. Other national patent offices also cooperate internationally. For the "Global Patent Prosecution Highway", which provides for accelerated examination of international patent filings, 17 patent offices collaborate, mainly those of the top 20 group.

¹¹⁹ See WIPO (2014), World Intellectual Property Indicators 2013, pp. 47 et seq., Fig. A.1.1.3 (applications, the share of non-resident applications varying between 35–40 %), Fig. 1.1.2.3 (grants, shares of grants to non-residents around 39 %). The shares are heavily influenced by the respective increases in the PR China; see also for details IP5-Statistics Report 2013, p. 30 et

percentage of foreign applications tends to be high, but overall these countries attract only a marginal share of patenting interest. 120 The reasons for the rise in patent numbers are not entirely clear, ¹²¹ nor are they necessarily the same as those for the geographic extension of protection. However, they do not simply correlate with more innovation or with broader globalization, but possibly also with (new) variations in the function and use of patents¹²² on the one hand, and, on the other, with the strategic focus of geographic protection on markets, which are relevant in terms of need of protection against likely imitation and/or opportunities of profitable exploitation. 123 From that perspective, therefore, for the vast majority of TRIPS Members or of partners to bilateral or regional agreements the rules on industrial property, in particular on patents, while possibly representing a future threat—as such they may have a chilling effect on domestic innovation—do not seem to lead immediately to foreign firms actually controlling their markets by virtue of property rights.

passim. For a general trend of a geographic, but clustered spread of technology leaders in terms of RandD efforts and patenting activity see WTO (2013), World Trade Report 2013 - Factors Shaping the Future World Trade, pp. 152 et seq.

¹²⁰ See WIPO (2014), World Intellectual Property Indicators 2013, p. 52, Table A.2.1.1: highincome countries have a share of world total applications of 78.5 % (2007) resp. 64.5 % (2012) and upper-middle income countries one of 17.7 % (2007) resp. 32.1 % (2012) with 17.9 % growth; if China is excluded, it is only a 4.6 % share in 2007 and 4.3 % share in 2012. By contrast, lower middle-income countries and low-income countries have shares of 3.3 % (2007), 2.9 % (2012) and 0.5 % (2007), 0.4 % (2012) resp., with growth rates of 2.5 % (2007) or 3.8 % (2012). For trademarks high-income countries had 58.7 % (2007) and 47.% (2012), upper-middle-income countries 30.3 % (2007) and 42 % (2012) including China; low middle-income countries and low-income countries 9.8 % (2007) and 9.4 % (2012) resp. 1.2 % in 2007 and 2012 (ibid. p. 105, table b.2.1.1). For designs, the picture is similar (ibid. p. 142, table C.2.1.1).

¹²¹ Patent propensity and growth rates vary from industry to industry and over time, with communication technologies showing a steady increase and large numbers, possibly in view of their specific forms of exploitation (standardization and pooling), see for 2007 - 2011: WIPO (2014), World Intellectual Property Indicators 2013, pp. 66 et seq., for 1980-2011; EPO (2014), Patent Information News 2014 (March), p. 7.

¹²² Catchwords are the use of patents, but also of trademarks as assets, exploitation by licensing as a main rather than a fringe business, use of patents in (open) standardization and in many forms of (open) innovation by international cooperation, see WIPO (2012), World Intellectual Property Report 2011 - The Changing Face of Innovation, pp. 23 et passim; D. Somaya & D. Teece (2008), Patents, Licensing, and Entrepreneurship: Effectuating Innovation in Multi-Invention Contexts, in D. Teece (Ed.), The Transfer and Licensing of Knowhow and Intellectual Property, p. 123.

¹²³ In regard of patents, the typical considerations are the costs of acquiring and maintaining patents, the availability of effective means of protection and monitoring problems, the locations of actual or of potential imitators (competitors or users) etc., see only A. Pham et al. (2010), Identifying the Optimal Global Patent Protection Strategy, 2010/2 VPP-Rundbrief 77; G. Weber et al. (2007), Patentstrategien, p. 17 et passim.

For the developed countries, by contrast, the emergence of some (and then often enough major) countries as rivals and/or buyers of intellectual-property-supported goods or services meant a change. 124 Not only did they have to focus their own strategies of protection on these emerging countries, but they also had to face these countries' strategies of focusing protection on their, the developed countries markets. 125 Therefore, underneath the concentration of existing industrial property rights on a limited number of TRIPS Members, a redistribution of powers and a shift of interests has occurred and is still occurring. Parts of the reaction of developed countries are to be found in the TRIPS-plus agreements. More important is the fact that there is now a relatively small group of States composed of incumbents, newcomers and challengers, which all follow a pro-active policy of intellectual property protection of their own, 126 with TRIPS essentially serving only as a common point of departure. Indeed, since TRIPS has resulted in adequate protection being available everywhere and in the legal tools needed to combat counterfeiting both internally and at the border existing everywhere, 127 the issues

¹²⁴ For the rapidly changing composition of the groups of developed, emerging and developing countries, and, as a result, of the power relations between countries, as symbolized by the rise of BRIC, see WTO (2014), World Trade Report 2014 – Trade and Development: Recent Trends and the Role of the WTO, p. 54 et passim.

¹²⁵ One model strategy for such counter-attack had been developed by Japan, see O. Granstrand (1999), The Economics and Management of Intellectual Property, p. 134 et passim, 218 et passim. Note that in 2013 Samsung had become the top ranking patent applicant at both the USPTO and the EPO, with Huawei ranking 11, see EPO (2013), Annual Report 2013, Top 25 applicants, with indication of origin; Intellectual Property Owners, TOP 300 Organizations Granted US Patents in 2012 (Samsung 2nd rank with 5.043 patents, IBM being first with 6.457 patents). While the individual ranking changes over time, and has changed since, the composition of the lead group of patent applicants and of patentees tends to remain fairly stable.

¹²⁶ Since the conclusion of the Uruguay Round, the EU has systematically up-graded its system of intellectual property protection, generally with the explicit aim of enhancing its international competitiveness: Directive 98/44 of July 1988 on the legal protection of biotechnological inventions (JOEC 1998 L 213,13); the introduction of supplementary certificates for medicinal and phyto-sanitary products (Reg. 1798/92 of 18 June 1992, JOEC 1992 L 182,1 - now Reg. 469/2009 of 6 May 2009, OJEC 2009 L 152,1 and Reg. 1610/96 of 23 July 1996, OJEC 1996 L 198/30); Reg. 2100/94 of the Council of 27 July 1994 on the protection of Community Plant Variety Rights (OJEC 1994 L 227,1); Directive 98/71/EC of 13 October 1998 on the legal protection of designs (OJEC 1998 L 289, 28); Reg. 6/2002 of the Council of 12 December 2001 on the Community Design (OJEC 2002 L 3, 1); Directive 93/98/EC of 29 October 1993 on the term of protection of copyright and certain related rights (OJEC 1993 L 290, 9, now Directive 2006/116/EC of 12 December 2006, OJ EU 2006 L 372, 12); Directive 96/9/EC of 11 March 1996 on the legal protection of databases (OJEC 1996 L 77, 20); Directive 2001/29/EC of 22 May 2001 on the harmonization of certain aspects of copyright and related rights in the information society (OJEC 2001 L 167,10); Directive 2004/48/EC of 29 April 2004 on the enforcement of intellectual property rights (OJEC 2004 L 157, 45); see also supra n. 51 and H. Ullrich (2012), Intellectual Property: Exclusive Rights for a Purpose - the Case of Technology Protection by Patents and Copyright, in K. Klafkowska-Wasniowska et al. (Eds.), Problemy Polskiego i Europejskiego Prawa Priwatnego (Contributions in Honour of M. Kepinski), p. 433 et passim (sub III.).

¹²⁷See Articles 52 et seq. TRIPS; for the EU see supra n. 48. Whether such border control is equally effective everywhere may be another matter. Customs control statistics of the Commission show a steady and steep increase in the number of cases of alleged imports of counterfeit and

necessarily shift from fixing a baseline of established principles of protection to extending protection to the gray zones. Such zones may be those, which are of particular advantage to some countries; they may also be those of new technologies or of new forms of their exploitation. The common denominator of these gray areas or categories of intellectual property rights is that they are surrounded by controversies as to the need, the use, and the limits of protection, not infrequently so even in developed countries. In that sense they are not yet settled enough for generalized international harmonization, let alone for trade deals among States of very different economic development.

pirated goods, but after years of fluctuation at high levels there is a sharp decline of the number of articles detained (see European Commission (2013), Report on EU Customs Enforcement of Intellectual Property Rights – Results at the EU Border 2012, sub 4). These statistics show the increasing use intellectual property owners make of customs control to stop infringement. They do not testify to any broader phenomenon of non-acceptance of the intellectual property regime of TRIPS by market actors in the exporting countries, the less so as much of counterfeiting and piracy is attributed to organized crime (see European Commission (2014), Towards a Renewed Consensus on the Enforcement of Intellectual Property Rights: An EU Action Plan, COM(2014)392/2 of 1 July 2014).

¹²⁸ As early as 1997, J. Reichman (1996–1997), From Free Riders to Fair Followers: Global Competition Under the TRIPS Agreement, 29 NYU J. Int.'l L.Pol., 27 et seq. (1997), stressed that TRIPS essentially related to the established principles of intellectual property protection.

¹²⁹ As regards the former, examples are the EU's interest in geographical indications or in extended protection of databases, or the USA's interest in patent protection of software-supported business methods (see supra n. 111). For the latter think of the many IP-related issues raised by the Internet, from the making available-right introduced by the WIPO Copyright Treaty of 1996 to Internet service providers' liability or the introduction of copyright related rights to protect newspaper snippets against use by search engine providers.

¹³⁰ For examples, see supra n. 129. In the EU, protection of must-match spare parts became controversial enough not to make it into the law (see Article 14 Design Directive; Article 110 Community Design Regulation, both supra n. 126), and the once proposed directive on the protection of computer-implemented software failed altogether. The Commission's project to harmonize the law of international exhaustion did not even mature into a proposal. The Directive on the protection of biotechnological inventions needed to contain its own "flexibilities" to pass through Parliament, and thereupon has been transposed differently into the national laws of Member States (see M. Varju & J. Sandor (2012), Patenting Stem Cells in Europe: The Challenge of Multiplicity in European Union Law, 49 CML Rev. 2012, 1007; Chr. Kilger & H.-J. Jaenichen (2005), Ende des absoluten Stoffschutzes? Zur Umsetzung der Biotechnologie-Richtlinie, GRUR 2005, 984). The protection of databases remains controversial at least as regards its contours (see E. Derclaye (2013), Database Rights: Success or Failure? The Chequered Yet Exciting Journey of Database Protection in Europe, in Chr. Geiger (Ed.), Constructing European Intellectual Property, p. 340), and even in the EU the protection of geographical indications is not well settled yet (see G. Evans (2013), The Simplification and Codification of European Legislation for the Protection of Geographical Indications, in Chr. Geiger (Ed.), Constructing European Intellectual Property, p. 177).

2.3.2 TRIPS in a Changing Context

Concomitantly with the changes within the intellectual property systems and with the development of a new divide between a limited number of intellectual propertyintense and a much larger, albeit varying number of less intellectual propertyintense countries, the markets covered by TRIPS have changed considerably as well. Thus, many national markets have undergone quite some development as a result of domestic industrial policies of all kinds (which actually may have made a country more intellectual property-intense). In addition, and more importantly, at least as regards some of their sectors, national markets have become highly dependent upon, if not an integral part of globalized markets. For one thing, firms, mainly transnational corporations (TNCs), have expanded not only the geographic scope of their business activities. Rather, the nature of these activities has developed as well. Thus, modern means and ways of communication and transport have made possible, depending on their needs and on the resources or socio-economic conditions offered by host countries, that TNCs now may and do enter into any of the various stages of the value creation chain outside their home countries. Aside from foreign direct investment, 131 non-equity modes of production, ¹³² including cooperation in research and development, ¹³³ licensing, franchising and sub-contracting of intermediate product manufacturing at various stages or outsourcing of services etc. have become widespread, with TNC-coordinated trade accounting for 80 % of the global value chains. 134 Frequently enough.

¹³¹ See UNCTAD (2013), World Investment Report 2013 – Global Value Chains: Investment and Trade for Development, p. 1 et passim (Chapters I-III). For a discussion of the controversial relationship between levels of intellectual property protection and foreign direct investment, see K. Maskus, K. Saggi & Th. Puttitanum (2005), Patent Rights and International Technology Transfer Through Direct Investment and Licensing, in K. Maskus & J. Reichman (Eds.), International Public Goods and Transfer of Technology Under a Globalized Intellectual Property Regime, p. 265 (with comment S. Kortum, ibid., p. 282).

¹³² See UNCTAD (2011), World Investment-Report 2011 – Non-Equity Modes of International Production and Development, p. 12 et passim; WIPO (2012), World Intellectual Property Report 2011 – The Changing Face of Innovation, p. 23 et passim.

¹³³ Such cooperation is not limited to "North-South" cooperation, see UNCTAD (2012), Technology and Innovation Report 2012 – Innovation, Technology and South-South Collaboration, passim.

¹³⁴ See UNCTAD (2013), World Investment Report 2013 – Global Value Chains: Investment and Trade for Development, General Overview, Key Messages, p. X, and Report at p. 121 et passim (Chapter IV); WTO (2013), World Trade Report 2013 – Factors Shaping the Future World Trade, p. 78 et passim, WTO (2014), World Trade Report 2014 – Trade and Development: Recent Trends and the Role of the WTO, p. 78 et passim; see also supra n. 54. Intra-firm trade also seems to have become more intense, albeit varying considerably from country to country (e.g. for the U.S.A.: 48 % of exports, 30 % of imports in 2009; for US – EU trade 47 % in 2002 and 50 % in 2012) and with industries, see R. Lanz & S. Miroudot (2011), Intra-Firm Trade: Patterns, Determinants and Policy Implications, OECD Trade Policy Papers No. 114, p. 12 et passim; European Commission (2013), DG Trade, Chief Economist Note: EU – US Economic Linkages: The Role of Multinationals and Intra-Firm Trade, ISSN 2034–9815 Issue Paper 2–2013.

this mode of an international "division of labor" concerns intellectual propertyrelated or supported activities, ¹³⁵ is attracted, and - with varying degrees of sophistication - controlled by the countries participating in value-adding, and tends to contribute to the advancement of domestic industry. ¹³⁶

For another thing, although as of yet the DOHA Round of Multilateral Trade Negotiations¹³⁷ has not been a successful follow-up to the Uruguay Round with the Bali Agreement postponing most matters of importance to 2015, ¹³⁸ international trade in goods and services ¹³⁹ and globalization of markets are progressing both *de facto* and *de jure*. Indeed, whatever distortions and complications of trade do or will result from the proliferation of bilateral and regional trade agreements, which the major trade powers have concluded or are negotiating, the result is and will be more interconnected markets. ¹⁴⁰

¹³⁵UNCTAD (2013), World Investment Report 2013 – Global Value Chains: Investment and Trade for Development, p. 144 et passim; WTO (2013), World Trade Report 2013 – Factors Shaping the Future World Trade, p. 160 et passim (stressing mutually reinforcing effects of trade and technological development).

¹³⁶ UNCTAD (2013), World Investment Report 2013 – Global Value Chains: Investment and Trade for Development, p. 148 et passim; WTO (2013), World Trade Report 2013 – Factors Shaping the Future World Trade, pp. 165 et seq.; WTO (2014), World Trade Report 2014 – Trade and Development: Recent Trends and the Role of the WTO, p. 94 et passim. The real effects are controversial and at least ambivalent for all countries concerned, see WTO (2014), World Trade Report 2014 – Trade and Development: Recent Trends and the Role of the WTO. As regards in particular a developed economy like Germany, see the "Basar-Ökonomie" dispute triggered by H.-W. Sinn (2005), Basar-Ökonomie Deutschland – Exportweltmeister oder Schlußlicht?, 58 (6) Ifo-Schnelldienst 3, 2005; H.-W. Sinn (2006), Der pathologische Exportboom, 59 (1) Ifo-Schnelldienst 1, 2006, with comments by various authors.

¹³⁷ For the problems see S. Hörmann (2010), in M. Hilf & St. Oeter (Eds.), WTO-Recht, p. 687 et passim; P.-T. Stoll & F. Schorkopf (2006), WTO – World Economic Order, World Trade Law, pp. 275 et seq.

¹³⁸ See WTO, Ministerial Conference, 9th Sess., Bali 3–6 December, Ministerial Declaration of 7 December 2013, with decisions and the "Agreement on Trade Facilitation" (TFA); WTO: News Items 27 November 2014, General Council, "WTO is "back on track", Azvedo says with Statement by the Chair of the General Council and Protocol WT/PCTF/W/28. For an early analysis of the TFA see G. Felbermayr et al. (2014), Bali-Abkommen: Wer gewinnt und wer trägt die Kosten?, 67(3) Ifo-Schnelldienst 3, 2014; J.M. Finger (2014), The WTO Trade Facilitation Agreement: Form Without Substance Again, 48 JWT 2014, 1279.

 $^{^{139}}$ See WTO (2013), World Trade Report 2013 – Factors Shaping the Future World Trade, pp. 5 et seq., 20 et passim (average growth rate 1980 – 2011: 7 % for goods, 8 % for services; developing countries increasing their share from, 34 % to 47 %, with China having a major impact as its share rose from 1 % to 11 %); also WTO (2014), World Trade Report 2014 – Trade and Development: Recent Trends and the Role of the WTO, pp. 24 et seq.

¹⁴⁰For intra- and inter-regional trade see WTO (2013), World Trade Report 2013 – Factors Shaping the Future World Trade, pp. 75 et seq. About 575 bilateral or regional trade agreements have been notified to the WTO for "approval" under Article XXIV GATT, with 379 being in force, see W. Kohler (2014), Das Welthandelssystem und die WTO nach "Bali 2013", 67 (3) Ifo-Schnelldienst 10, 2014; see generally for the regionalization of trade S. Boysen (2010), in M. Hilf & St. Oeter (Eds.), WTO-Recht, pp. 669 et seq. (§ 31, II.2); R. Senti (2013), Regionale Freihandelsabkommen, p. 19 et passim.

2.3.3 From Trade Law to International Economic Law

In sum, there seems to be a convergence of trends towards broadened and enhanced intellectual property protection, tighter market linkages due to vertical specialization along the global value-adding chain and intra-firm trade, progressive regional integration and trade clustering around economic center countries, which all overlay the WTO/GATT and TRIPS structures. This does not mean that national markets become altogether globally integrated, since domestic activities generally remain dominant, in particular as far as countries with large internal markets are concerned. 141 However, at least as regards countries and/or industries, which heavily participate in and/or profit from the international division of labor, regulation of "domestic" markets is no longer simply an internal matter. Inbound and outbound activities do not change their nature at the border, but are complementary components of a production and/or distribution chain, and, as such, need to be regulated with a view to their interconnectedness. The intrusion of international trade regulation into domestic market regulation is particularly intense in the case of cross-border trade in services, where the service is supplied directly on the domestic market of destination or may also be sought directly on the supplier's territory, since "liberalization" requires adaptation either of the service or of its regulatory standards. 142 As regards trade in goods, similar problems arise not only where their manufacture or distribution is supported by services, such as computing, telecommunication or transportation, etc., but generally to the extent that the goods are subject to (technical) standards of quality, safety, etc. The matter is well known from the TBT and the SPS Agreements, which already provide for certain limited - obligations of information, cooperation or recognition between Members and, as regards the substance of regulation, for a general rule of proportionality. 143

"Deep Trade" Agreements

However, where more advanced trade liberalization is the aim, in particular in bilateral or regional trade agreements, the problem takes on broader dimensions, which, in essence, are similar to those known from the creation of the European

¹⁴¹ See WTO (2013), World Trade Report 2013 – Factors Shaping the Future World Trade, p. 63 et passim, 82 et passim.

¹⁴² This is the problem of GATS, see M. Michaelis (2010), in M. Hilf & St. Oeter (Eds.), WTO-Recht, § 20, nos 7 et passim; M. Trebilcock, R. Howse & A. Eliason (2013), The Regulation of International Trade, p. 474 et passim.

¹⁴³ See Articles 2, 10 TBT Agreement, Articles 2, 3, 5 SPS Agreement; P.-T. Stoll & F. Schorkopf (2006), WTO – World Economic Order, World Trade Law, Nos. 100, 397, 404, 443 et seq., Generally P. Van den Bossche (2008), Looking for Proportionality in WTO Law, 35 Leg. Iss. Econ. Integr. 2008, 283; with regard to TRIPS more specifically M. Wallot (2015), The Proportionality Principle in the TRIPS Agreement, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 213 (this volume).

Union's internal market. ¹⁴⁴ As not only discriminatory, but all market regulations come to be realized as trade barriers, which, due simply to national divergences, affect trade, their justification comes under scrutiny. As a consequence, more will need to be done than merely recognizing common principles upon which to determine which public interest may support which form of regulation, and to what extent it may do so. ¹⁴⁵ The market regulation itself will have to be redefined so as to both create common standards ensuring uniform conditions of trade and still cater for the public interests of all countries concerned, i.e. the internal regulation of domestic markets becomes a matter of a common interest of all parties.

This process will vary with the nature and the degree of market integration, but it invariably shows two characteristics: First, with the public policy justification of market regulation, more interests come into play and need to be taken into account than mere trade interests. ¹⁴⁶ Second, even so, there will remain a problem of legitimacy, since markets are not fully and completely transformed from domestic into international markets, and yet they become subject to the same internationally uniform conditions. Therefore, thresholds need to be fixed for the establishment of an overarching market regulation ensuring those uniform "terms of trade". These may be lower or higher depending on the level of market integration. ¹⁴⁷ However, instead of being (constitutionally or otherwise ¹⁴⁸) pre-determined, they are themselves made the subject of trade negotiations, particularly so in the case of bilateral or regional trade agreements of the "deep trade/integration"-type, i.e. free trade agreements aimed at removing trade obstacles resulting from the internal regulation

¹⁴⁴See H. Ullrich (2012), Gewerblicher Rechtsschutz und Urheberrecht im Binnenmarkt, in U. Immenga & E.J. Mestmäcker (Eds.), Wettbewerbsrecht Band 1, Teil 2, p. 1589 et passim (nos. 33 et passim).

¹⁴⁵ As illustrated in the EU by the Cassis de Dijon- case law (ECJ, Rewe/Bundesmonopolverwaltung für Branntwein, C-120/78, EU:C:1979:42), which sidestepped Article 36 TFEU only to have to be limited subsequently in Keck et Mithouard (ECJ, Keck and Mithouard, C-267/91 and C-268/91, EU:C:1993:905) and its follow-up decisions, see P. Oliver & St. Enchelmaier (2010), Free Movement of Goods in the European Union, p. 104 et passim; H. Ullrich (2012), Gewerblicher Rechtsschutz und Urheberrecht im Binnenmarkt, in U. Immenga & E.J. Mestmäcker (Eds.) Wettbewerbsrecht, Band 1, Teil 2, 5. Auflage, Nos. 34 et seq., 37 et seq., p. 1590 et seq.

¹⁴⁶ Such as the protection of consumers or of the environment, public health, human rights, etc., with, as a result, more interest groups becoming involved in the "trade"-law-making process.

¹⁴⁷ In the European Union, these are the principle of subsidiarity (Article 5 TEU) and the criterion of "distortion of trade" or of "the functioning of the internal market" (Articles 26, 114, 118 TFEU). ¹⁴⁸ The regulation of customs unions and free trade areas by Article XXIV GATT does not work as a dividing line between "trade approaches" and "integration approaches" to international regulation of markets. It does not allow control over the constitutional organization of regional or of other forms of integration, and it seems to be ineffective even within its genuine ambit, see W. Kohler (2014), Das Welthandelssystem und die WTO nach "Bali 2013", 67 (3) Ifo-Schnelldienst 10, 2014; S. Boysen (2010), in M. Hilf & St. Oeter (Eds.), WTO-Recht, p. 673 et passim (685 et seq.); M. Trebilcock, R. Howse & A. Eliason (2013), The Regulation of International Trade, p. 83 et passim.

of the domestic markets of the parties. Even where these agreements do not themselves provide for "standards" or for quality or safety regulations of like effect, but leave the matter to mutual recognition, to coordination or implementation by the parties to the agreement, they tend to become ever more prescriptive, and they do so on the basis of trade concessions (of whatever kind) rather than on that of a common, overarching process of defining and balancing public policies with a view to a law-making for all. ¹⁴⁹

IP: Level Playing Fields at Different Levels

It is on the same rationale of uniformity of the conditions of trade (or, for that matter, of competition) on markets, which are no longer purely domestic, but global in essential parts, that domestic intellectual property policies are "traded" into a set of internationally common rules of protection. As these rules must not only serve to protect international market actors from domestic imitation on the import market, but ought to govern also competition among these actors, the rules must be defined accordingly. 150 In addition, these rules must support innovation and creation on both the remaining domestic (i.e. the local) market and on the larger market, which is internationally relevant in terms of geographic and product competition. From that perspective, nation-state-oriented approaches to international intellectual property protection¹⁵¹ no longer promise adequate rules.¹⁵² Instead of reading such an orientation into the TRIPS Agreement by stretching its "flexibilities", the Agreement - including its flexibilities - should be understood as a general baseline, from which not only individual States (Art. 1(1), 2nd sentence TRIPS), but groups of States may start developing systems of intellectual property rights, whose level of protection is "adequate", 153 for the group.

Clearly, such a more realistic proposition will work for homogeneous groups better than for groups, which are composed of countries of (very) different economic development. For the former, the establishment of a system of enhanced protection will not raise genuine issues of trade, but issues of properly defining what the level of protection should be. For the latter, a trade approach including the use of leverage power is likely to be followed, possibly with unfair results, in particular

 $^{^{149}}$ As is the case on the State level or in highly advanced types of regional integration, such as e.g. the EU.

¹⁵⁰ See supra Sect. 2.2.4, text accompanying n. 110 et seq.

¹⁵¹ See supra n. 112.

¹⁵²Some countries seek to accommodate for the different innovation capacities and needs by establishing a two tier system of patent protection for utility models and for higher level inventions respectively (see H. Grosse Ruse- Khan (2013), The International Legal Framework for the Protection of Utility Models, 4 WIPO J. 2013, 175). However, as useful as a system of protecting petty patents may be, domestic industry also needs equal access to patent protection for genuine inventions, and foreign competitors ought to be equally subject to that form of protection that best meets the needs of the domestic economy and the objectives of domestic policies.

¹⁵³ See TRIPS, Preamble, 1st sentence and its lit. b), c).

with standards of protection, which are not adapted to the needs of the less developed partners. 154 However, the development issue needs to be separated from the TRIPS Agreement and treated on its own terms anyway, 155 and it needs to be so treated also vis-à-vis the standards of protection of the more developed groups. This is all the more opportune as in the field of intellectual property, the problems generally associated with the fragmentation of the WTO's world trading order into bilateral and regional trade agreements, namely block-building and increased complexity of rules, ¹⁵⁶ are unlikely to become a matter of a major general concern. The reasons are, first, that, in contrast with the pre-TRIPS era, there is now a generally accepted baseline of global protection; second, that intellectual property protection seems to continuously develop along a line of ever more and broader protection; and, third, that there are enough for a for facilitation and harmonization of protection. Today's real problems of (international) intellectual property protection are its own inherent deficits, such as poorly defined trade-offs regarding the horizontal and the vertical dilemmas of granting rights to exclusivity, ¹⁵⁷ its potential for over-protecting some technologies while possibly under-protecting others, 158 its unequal operation for big enterprise and for SMEs or for non-profit institutions, and its difficulties in dealing with the interdependencies, which exist between the promotion of innovation and creation in general and that of other, mostly more specific public interests, such as access to affordable medi-

¹⁵⁴ See J. Drexl (2015), The Concept of Trade-Relatedness of Intellectual Property Rights in Times of Post-TRIPS Bilateralism, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 53 (this volume), Sect. 4.4, and references infra n. 155.

¹⁵⁵ See supra n. 61, 63. The WIPO Development Agenda, as decided in 2007 seeks to specifically address a number of the issues of intellectual property and development, but does not seem to make much progress (see C. Saez (2009), Crisis at WIPO over Development Agenda, Overall Objectives in Question, in IP Watch of 24 May). For this Agenda see generally the contributions in N. Weinstock Netanel, Ed. (2009), The Development Agenda, Oxford.

¹⁵⁶ See M. Hilf & St. Oeter (2010), WTO-Recht, § 33 III and the references supra n. 115. See, however as regards even TRIPS the drastic presentation of the TRIPS negotiation process by P. Drahos & J. Braithwaite (2002), Information Feudalism – Who Owns the Knowledge Economy?, pp. 133 et seq.

¹⁵⁷ See supra Sect. 2.2.2. An illustration of such failure is the 70 years pma term of copyright protection for computer programs; another is the purposive neglect of compulsory licensing as way to overcome blocking situations between patents, see H. Ullrich (2014), Compulsory Licenses Under Patent Law: European Concepts, in W. Kaal et al. (Eds.), Festschrift Chr. Kirchner, p. 404 et passim.

¹⁵⁸ For the "one-size-fits-all" problem, see references supra n. 66.

cines, ¹⁵⁹ protection of the end-consumer ¹⁶⁰ or of the environment or energy saving. ¹⁶¹ Almost all of these deficits are not trade-related, but "home-made", and thus need to be tackled "at home". The irony, then, may be that the more or "deeper" a bilateral or regional trade agreement operates "behind the border", and interferes with domestic market regulation, the greater the chances of broader democratic opposition against misdirected intellectual property protection might become. ¹⁶²

3 Conclusion

To the extent that trade law increasingly comes to interconnect with domestic market regulation and, thus, tends to interfere also with other national public interests, it needs to be understood more broadly as international economic law,

¹⁵⁹ Which is not only a development issue (see supra n. 63), but one that exists in the USA and the EU as well, see for the EU Ch. Godt (2010), Differential Pricing of Patent-Protected Pharmaceuticals for Life-Threatening Infectious-Diseases inside Europe – Can Compulsory Licenses be Employed, in Ch. Godt (Ed.), Differential Pricing of Pharmaceuticals inside Europe, p. 27 et passim.

¹⁶⁰ See A. Ohly (2015), TRIPS and Consumer Protection, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 681 (this volume). The relationship between consumer protection and intellectual property protection varies with the category of intellectual property; typically, it is rather ambivalent. Concerns for affordable access to medicines (or food) have accompanied the development of patent law ever since and in almost all countries (see e.g. Ph. Johnson (2013), Access to Medicines and the Growth of the Pharmaceutical Industry in Britain, in G. Dinwoodie (Ed.), Methods and Perspectives in Intellectual Property, p. 329), consumer protection against deception is at the root of trademark law, and the Internet has made everybody aware of the impact of copyright on consumer interests. Yet, legal literature on TRIPS has not developed a specific analytical focus on "TRIPS and consumer protection". For the WTO in general see Th. Voland (2007), Verbraucherschutz und Welthandelsrecht, passim (examining TRIPS only as regards access problems, p. 262 et passim). ¹⁶¹ See the contribution by A.A. Machnicka (2015), TRIPS and Climate Change in the International Economic Order, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 415 (this volume).

¹⁶² One example is the failure of ACTA, see T. Jaeger (2015) Merging ACTA into TRIPS: Does TRIPS-Based IP Enforcement Need Reform?, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 621 (this volume). Another even more worrying example is presented by the broad political controversies on Internet-related copyright protection, which raise fundamental issues of acceptance of the law not only by "stakeholders", but by the general public, see S. Ericsson (2015), The Commodification of Internet Intermediary Safe Harbors: Avoiding Premature Harmonization around a Suboptimal Standard, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 245 (this volume); M. Lamping (2015), Intellectual Property Harmonization in the Name of Trade, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 313 (this volume). On the need to "democratize intellectual property" see in particular P. Drahos & J. Braithwaite (2002), Information Feudalism – Who Owns the Knowledge Economy?, pp. 189 et seq.

which governs the organization of open markets. Such an understanding will allow both the clearer separation of trade issues from the many other issues of market regulation, such as development, public health, consumer protection as well as precisely intellectual property protection, and yet allow them to be seen as parts of a coherent organization of markets. National or, for that matter, international systems of intellectual property protection must, indeed, be understood not only as affording the protection of individual property rights, but also as part of the framework regulation of innovation markets, since their configuration determines the conditions at which technological competition may and must take place. ¹⁶³ The "trade-related" approach to intellectual property rights together with a focus on the exclusivity, which they confer upon their owners, have obfuscated the macroeconomic problems of their protection more than they have contributed to improving the overall operation of the systems of intellectual property. The USA still is as much concerned about its international competitiveness as ever, and so is the European Union. ¹⁶⁴

References

Abbott, F. (2009), Cross Retaliation in TRIPS: Options for Developing Countries, ICTSD Issue Paper No. 8, Geneva: ICTSD

Abbott, F. (2014), Trade Costs and Shadow Benefits: EU Economic Partnership Agreements as Models for Progressive Development of International IP Law, in J. Drexl et al. (Eds.), EU Bilateral Trade Agreements and Intellectual Property: For Better or Worse, p. 159, Heidelberg: Springer

Aginam, O. et al. (2013). The Global Governance of the HIV/AIDS – Intellectual Property and Access to Essential Medicines, Cheltenham: Edward Elgar

Aleman, H. (2014), Impact of TRIPS-Plus Obligations in Economic Partnership- and Free Trade Agreements in International IP Law, in J. Drexl et al. (Eds.), EU Bilateral Trade Agreements and Intellectual Property: For Better or Worse, p. 61, Heidelberg: Springer

Ankersmith, L. (2014), The Scope of the Common Commercial Policy after Lisbon: The Daiichi Sankyo and Conditional Access Services Grand Chamber Judgments, 41 Legal Iss. Econ. Integr. 2014, 193, Alphen aan den Rijn: Wolters Kluwer

Bail, Ch. (1990), Das Profil einer neuen Welthandelsordnung: Was bringt die Uruguay Runde?, EuZW 1990, 433, Munich: C.H. Beck

Beier, F.-K. & Schricker, G. (1989), GATT or WIPO – New Ways in the International Protection of Intellectual Property, Weinheim: VCH

¹⁶³ See references supra n. 65, 66; H. Ullrich (2009), Propriété intellectuelle, concurrence et régulation – Limites de protection et limites de contrôle, R.I.D.E. 2009, 399, 407 et passim, 411 et seq.

¹⁶⁴ See U.S. Department of Commerce, National Economic Council (2012), The Competitiveness and Innovative Capacity of the United States, passim (pp. 7–11 et seq.); European Commission (2011), Communication of 24 May 2011 to the European Parliament and the Council, A Single Market for Intellectual Property Rights: Boosting Creativity and Innovation to Provide Economic Growth, High Quality Jobs, and First Class Products and Services, COM(2011), 287 final, sub 1, 2.

- Bently, L. (2011), Exclusions from Patentability and Exceptions to Patentee's Rights: Taking Exceptions Seriously, 64 Current Legal Problems 2011, 315, Oxford: Oxford University Press
- Bourgeois, H.J., Berrod F. & Gippini Fournier E. (1995), The Uruguay Round Results, Brussels: European Interuniversity Press
- Bundesministerium für Wirtschaft (2013), Fakten zum deutschen Außenhandel 2012, available at: www.Bmwi.de/Redaktion/PDF/fakten-zum-deutschen-aussenhandel-2011 (accessed 20 May 2015)
- Burk, D. & Lemley, M. (2009), Policy Levers in Patent Law, 89 Va. L. Rev. 1575 (2009), Charlottesville: The Virginia Law Review Association
- Carroll, M. (2010), American University, WCL Research Paper No. 2010–07, Washington D.C.: American University
- Coppens, P.H. & Culot, H. (2015), La suspension de l'Accord ADPIC comme sanction de la violation des règles de l'OMC, in A. Autenne et al. (Eds.), Droit, Économie et Valeurs, Hommage à B. Remiche, Brussels: Larcier
- Cornish, W. & Liddell, K. (2015), The Origins and Structure of the TRIPS Agreement, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles (p. 3), Heidelberg: Springer (this volume)
- Correa, C. (2014), The Impact of Economic Partnership Agreements on WTO Law, in Drexl, J. et al. (Eds.), EU Bilateral Trade Agreements and Intellectual Property: For Better or Worse, p. 87, Heidelberg: Springer
- Croome, J. (1995), Reshaping the World Trading System A History of the Uruguay Round, Geneva: World Trade Organization
- David, P. (1993), Intellectual Property Institutions and the Panda's Thumb: Patents, Copyrights, and Trade Secrets in Economic Theory and History, in M. Wallerstein (Ed.), Global Dimensions of Intellectual Property Rights in Science and Technology, p. 19, Washington D.C.: National Academy Press
- Deardorff, A. (1990), Should Patent Protection Be Extended to All Countries?, 13 World Econ. 1990, 497, Hoboken: John Wiley & Sons
- Derclaye, E. (2013), Database rights: success or failure? The chequered yet exciting journey of database protection in Europe, in Chr. Geiger (Ed.), Constructing European Intellectual Property, p. 340, Cheltenham: Edward Elgar
- Dinwoodie, G. & Dreyfuss, R. (2012), A Neofederalist Vision of TRIPS: Building a Resilient International Intellectual Property System, Oxford: Oxford University Press
- Drahos, P. & Braithwaite, J. (2002), Information Feudalism Who Owns the Knowledge Economy?, London: Earthscan
- Drahos, P. (1996), A Philosophy of Intellectual Property, Dartmouth: Ashgate
- Drahos, P. (2002), Developing Countries and International Intellectual Property Standard-Setting, 5 J. W. Intell. Prop. 2002, 765, Hoboken: John Wiley & Sons
- Drahos, P. (2004), The Regulation of Public Goods, 7 J. Int'l Econ. L. 2004, 321; also published in K. Maskus & J. Reichman (2005), International Public Goods and Transfer of Technology Under a Globalized Intellectual Property Regime, p. 46, Cambridge: Cambridge University Press
- Drexl, J. (2015), The Concept of Trade-Relatedness of Intellectual Property Rights in Times of Post-TRIPS Bilateralism, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles (p. 53), Heidelberg: Springer (this volume)
- Drexl, J. et al., Eds. (2014), EU Bilateral Trade Agreements and Intellectual Property: For Better or Worse, Heidelberg: Springer
- Dunkel, A. (1987), Trade Policies for a Better Future The "Leutwiler Report", the GATT and the Uruguay Round, Leiden: Martinus Nijhoff
- Dutfield, G. (2008), Delivering Drugs to the Poor: Will the TRIPS Amendment Help?, 34 Am. J.L. & Med. 2008, 1, Boston: Boston University School of Law
- EPO (2013), Annual Report 2013, Munich: EPO
- EPO (2014), Patent Information News 2014 (March), Munich: EPO

Ericsson, S. (2015), The Commodification of Internet Intermediary Safe Harbors: Avoiding Premature Harmonization around a Suboptimal Standard, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles (p. 245), Heidelberg: Springer (this volume)

- European Commission (2011), Communication of 24 May 2011 to the European Parliament and the Council, A Single Market for Intellectual Property Rights: Boosting Creativity and Innovation to Provide Economic Growth, High Quality Jobs, and First Class Products and Services, COM(2011), 287 final
- European Commission (2013), Report on EU Customs Enforcement of Intellectual Property Rights Results at the EU Border 2012, Luxemburg: Publications Office of the European Union
- European Commission (2013), DG Trade, Chief Economist Note: EU US Economic Linkages: The Role of Multinationals and Intra-Firm Trade, ISSN 2034–9815 Issue Paper 2–2013
- European Commission (2014), Towards a Renewed Consensus on the Enforcement of Intellectual Property Rights: An EU Action Plan, COM(2014)392/2 of 1 July 2014
- Evans, G. (2013), The Simplification and Codification of European Legislation for the Protection of Geographical Indications, in Chr. Geiger (Ed.), Constructing European Intellectual Property, p. 17, Cheltenham: Edward Elgar
- Felbermayr, G. et al. (2014), Bali-Abkommen: Wer gewinnt und wer trägt die Kosten?, 67(3) Ifo-Schnelldienst 3, 2014, Munich: CESifo
- Finger, J.M. (2014), The WTO Trade Facilitation Agreement: Form Without Substance Again, 48 J.W.T. 2014, 1279, Alphen aan den Rijn: Wolters Kluwer
- Finger, J.M. (2007), Implementation and Imbalance. Dealing with Hangover from the Uruguay Round, 23 Oxford Rev. Econ. Pol'y 2007, 440, Oxford: Oxford University Press
- Frankel, S. (2009), Challenging TRIPS-Agreements: The Potential Utility of Non-Violation Disputes, 12 J. Int'l. Econ. L. 2009, 1023, Oxford: Oxford University Press
- Geiger, Ch., Griffiths, J. & Hilty, R. (2008), Declaration: A Balanced Interpretation of the "Three-Step Test" in Copyright Law, 39 IIC 2008, 707, Munich: C.H. Beck
- Gervais, D. (2009), (Re)Implementing the Agreement on Trade-Related Aspects of Intellectual Property Rights to Foster Innovation, 12 J. W. Intell. Prop. 2009, 348, Hoboken: John Wiley & Sons
- Girard, P.-L. (1995), De Punta del Este à Marrakech: le processus de négociation, in Cottier, Th. (Ed.), GATT-Uruguay Round: Nine Papers, p. 23, Berne: Stämpfli
- Godt, Ch. (2010), Differential Pricing of Patent-Protected Pharmaceuticals for Life-Threatening Infectious-Diseases inside Europe Can Compulsory Licenses be Employed, in Godt, Ch. (Ed.), Differential Pricing of Pharmaceuticals inside Europe, p. 27, Baden-Baden: Nomos
- Govaere, I. (1997), Convergence, Divergence and Interaction of Regional Trade Agreements and the Agreement on Trade Related Aspects of Intellectual Property Rights, in Demaret, P. et al. (Eds.), Regionalism and Multilateralism After the Uruguay Round, p. 465, Brussels: European University Press
- Granstrand, O. (1999), The Economics and Management of Intellectual Property, Cheltenham: Edward Elgar
- Grosse Ruse- Khan, H. (2013), The International Legal Framework for the Protection of Utility Models, 4 WIPO J. 2013, 175, Geneva: WIPO
- Grosse Ruse-Kahn, H. (2011), Assessing the Need for a General Public Interest Exception in the TRIPS Agreement, in A. Kur (Ed.), Intellectual Property Rights in a Fair World Trade System Proposals for Reform, p. 167, Cheltenham: Edward Elgar
- Grosse Ruse-Khan, H. (2008), A Pirate of the Caribbean? The Attraction of Suspending TRIPS Obligations, 11 J. Int'l Econ. L. 2008, 313, Oxford: Oxford University Press
- Grosse Ruse-Khan, H. et al. (2013), Principles for Intellectual Property Provisions in Bilateral and Regional Agreements, 44 IIC 2013, 878, Heidelberg/Munich: Springer/C.H. Beck
- Guzetti, L. (1995), A Brief History of European Research Policy, Brussels: European Commission

- Haedicke, M. (1997), Urheberrecht und die Handelspolitik der Vereinigten Staaten von Amerika, Munich: C.H. Beck
- Hassan, E. et al. (2010), Intellectual Property and Developing Countries, Cambridge: RAND
- He, H. (2010), The Development of Free Trade Agreements and International Protection of Intellectual Property Rights in the WTO Era – New Bilateralism and Its Future, 41 IIC 2010, 253, Munich: C.H. Beck
- Heilein, E.-P. (2002), Die Bedeutung des Rechtsschutzes für integrierte Halbleiterschaltkreise in der Praxis, Frankfurt: Peter Lang
- Heydon, K. (2014), Plurilateral Agreements and Global Trade Governance: A Lesson from the OECD, 48 J.W.T. 2014, 1039, Alphen aan den Rijn: Wolters Kluwer
- Hilf, M. & Oeter, St. (2005), WTO-Recht, 1st ed., Baden-Baden: Nomos
- Hilf, M. & Oeter, St. (2010), WTO-Recht, 2nd ed., Baden-Baden: Nomos
- Hilty, R.M. & Liu, K.-Ch., Eds. (2015), Compulsory Licensing Practical Experiences and Ways Forward, Heidelberg: Springer
- Jaeger, Th. (2014), IP-Enforcement Provisions in EU Economic Partnership Agreements, in Drexl,J. et al. (Eds.), EU Bilateral Trade Agreements and Intellectual Property: For Better or Worse,p. 189, Heidelberg: Springer
- Jaeger, Th. (2015), Merging ACTA into TRIPS: Does TRIPS-Based IP Enforcement Need Reform?, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles (p. 621), Heidelberg: Springer (this volume)
- Jaeger, Th. et al. (2010), Statement of the Max Planck-Institute for Intellectual Property, Competition and Tax Law on Customs Enforcement of Intellectual Property, Rights, 41 IIC 2010, 6748. Munich: C.H. Beck
- Johnson, Ph. (2013), Access to Medicines and the Growth of the Pharmaceutical Industry in Britain, in G. Dinwoodie (Ed.), Methods and Perspectives in Intellectual Property, p. 329, Cheltenham: Edward Elgar
- Katzenberger, P. (1996), TRIPS and Copyright Law, in F.-K. Beier & G. Schricker (Eds.), From GATT to TRIPS, p. 59, Weinheim: VCH
- Kilger, Ch. & Jaenichen, H.-J. (2005), Ende des absoluten Stoffschutzes? Zur Umsetzung der Biotechnologie-Richtlinie, GRUR 2005, 984, Munich: C.H. Beck
- Knaak, R. (1988), National and International Efforts Against Trademark Counterfeiting A Progress Report, 19 IIC 1988, 581, Weinheim: Verlag Chemie
- Kohler, W. (2014), Das Welthandelssystem und die WTO nach "Bali 2013", 67(3) Ifo-Schnelldienst 10, 2014
- Kortum, S. (2005), Comment: TRIPS and Technology Transfer Evidence from Patent Data, in K. Maskus & J. Reichman (Eds.), International Public Goods and Transfer of Technology Under a Globalized Intellectual Property Regime, p. 282, Cambridge: Cambridge University Press
- Krikorian, G. & Szymkowiak, D. (2007), Intellectual Property Rights in the Making: The Evolution of Intellectual Property Provisions in USA Free Trade Agreements and Access to Medicines, 10 J. W. Intell. Prop. 2007, 388, Hoboken: John Wiley & Sons
- Kur, A. & Grosse Ruse-Khan, H. (2011), Enough is Enough The Notion of Binding Ceilings in International Intellectual Property Protection, in A. Kur (Ed.), Intellectual Property Rights in a Fair World Trade System – Proposals for Reform, p. 359, Cheltenham: Edward Elgar
- Kur, A. (2011), Limitations and Exceptions under the Three-Step Test How much Room to Walk the Middle Ground?, in A. Kur (Ed.), Intellectual Property Rights in a Fair World Trade System Proposals for Reform, p. 208, Cheltenham: Edward Elgar
- Lamping, M. (2014), Declaration on Patent Protection: Regulatory Sovereignty under TRIPS (Version 1.0 of 15 April 2014), published in 45 IIC 2014, 679, available at: http://www.ip.mpg.de/en/news/declaration_on_patent_protection.html (accessed 20 May 2015)
- Lamping, M. (2015), Intellectual Property Harmonization in the Name of Trade, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles (p. 313), Heidelberg: Springer (this volume)

Lanz, R. & Miroudot, S. (2011), Intra-Firm Trade: Patterns, Determinants and Policy Implications, TAD/TC/WP(2010)27/FINAL, OECD Trade Policy Papers No. 114 of 24 May 2011

- Lowenfeld, A. (2002), International Economic Law, Oxford: Oxford University Press
- Machnicka, A.A. (2015), TRIPS and Climate Change in the International Economic Order, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles (p. 415), Heidelberg: Springer (this volume)
- Marchetti, J. & Roy, M. (2014), The TISA Initiative: An Overview of Market Access Issues, 48 J. W.T. 2014, 683, Alphen aan den Rijn: Wolters Kluwer
- Maskus, K. (2000), Intellectual Property Rights in the Economy, Washington D.C.: Institute for International Economics
- Maskus, K. (2014), Assessing the Development Promise of IP Provisions in EU Economic Partnership Agreements, in J. Drexl et al. (Eds.), EU Bilateral Trade Agreements and Intellectual Property: For Better or Worse, p. 171, Heidelberg: Springer
- Maskus, K., Saggi, K. & Puttitanum, Th. (2005), Patent Rights and International Technology Transfer Through Direct Investment and Licensing, in K. Maskus & J. Reichman (Eds.), International Public Goods and Transfer of Technology Under a Globalized Intellectual Property Regime, p. 265, Cambridge: Cambridge University Press
- Matthews, D. (2002), Globalizing Intellectual Property Rights the TRIPS Agreement, London: Routledge
- Matthews, D. (2010), The Lisbon Treaty, Trade Agreements and the Enforcement of Intellectual Property Rights, 32 E.I.P.R. 2010, 104, London: Sweet & Maxwell
- Matthews, D. (2011), When Framing Meets Law: Using Human Rights as a Practical Instrument to Facilitate Access to Medicines in Developing Countries, 3 WIPO J. 2011, 113, Geneva: WIPO
- Melo Aranjo, B. (2013), Intellectual Property and the EU's Deep Trade Agenda, 16 J. Int'l. Econ. L. 2013, 439, Oxford: Oxford University Press
- Morin, J.F. (2009), Multilateralizing TRIPS-Plus Agreements: Is the USA-Strategy a Failure?, 12 J. W. Intell. Prop. 2009, 175, Hoboken: John Wiley & Sons
- Norton, R. (1986), Industrial Policy and American Renewal, 24 JEL 1986, 1, Nashville: American Economic Association
- OECD (1995), The New World Trading System Readings, Paris: OECD
- Ohly, A. (2015), TRIPS and Consumer Protection, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles (p. 681), Heidelberg: Springer (this volume)
- Oliver, P. & Enchelmaier, St. (2010), Free Movement of Goods in the European Union. 5th ed., Oxford: Hart Publishing
- Olwan, R.M. (2013), Intellectual Property and Development: Theory and Practice, Berlin: Springer
- Ostry, S. & Nelson, R. (1995), Techno-Nationalism and Techno-Globalism, Paris: OECD
- Otten, A. (1995), Improving the Playing Field for Exports: The Agreement on Intellectual Property, Investment Measures and Government Procurement, in Th. Cottier (Ed.), GATT-Uruguay Round: Nine Papers, p. 67, Berne: Stämpfli
- Paas, K. (2009), Compulsory Licensing under the TRIPS Agreement: A Cruel Taunt for Developing Countries?, 31 E.I.P.R. 2009, 609, London: Sweet & Maxwell
- Pacon, A.M. (1996), What will TRIPS Do for Developing Countries?, in F.-K. Beier & G. Schricker (Eds.), From GATT to TRIPS, p. 329, Weinheim: VCH
- Pauwelyn, J. (2010), The Dog That Barked But Didn't Bite: 15 Years of Intellectual Property Disputes at the WTO, 1 J. Int'l. Dispute Settlement 2010, 389, Oxford: Oxford University Press
- Pelkmans J., (1995), The Economic Significance of the Round, in H.J. Bourgeois, F. Berrod & E. Gippini Fournier (Eds.), The Uruguay Round Results, p. 43, Brussels: European Interuniversity Press
- Perez Pugatch, M. (2011), Intellectual Property Policy Making in the 21st Century, 3 WIPO J. 2011, 71, Geneva: WIPO

- Petersmann, E.-U. (2014), Multilateral Governance Problems of the World Trading System Beyond the WTO Conference at Bali, 17 J. Int'l Econ. L. 2014, 233, Oxford: Oxford University Press
- Peukert, A. (2014), Immaterialgüterrecht und Entwicklung, in Ph. Dann et al. (Eds.), Entwicklung und Recht: Eine systematische Einführung, p. 189, Baden-Baden: Nomos
- Pham, A. et al. (2010), Identifying the Optimal Global Patent Protection Strategy, 2010(2) VPP-Rundbrief 77, Frankfurt: VPP
- Rangel-Ortiz, H. (2014), Patent and Trademark Rights in Commercial Agreements Entered by the United States with Latin American Nations in the First Decade of the Twenty-first Century: Divide et Vinces, in G. Ghidini et al. (Eds.), TRIPS and Developing Countries, p. 72, Cheltenham: Edward Elgar
- Reichman, J. (1996–1997); From Free Riders to Fair Followers: Global Competition Under the TRIPS Agreement; 29 NYU J. Int.'l L.Pol. 27 (1997), New York: New York University School of Law
- Reichmann, J. & Lange, D. (1998), Bargaining Around the TRIPS Agreement: The Case for Ongoing Public-Private Initiatives to Facilitate Worldwide Intellectual Property Transactions, 9 Duke J. Comp. & Int'l. L. 21 (1998), Durham: Duke University School of Law
- Rinnert, S. (2014), Die neue Customs-IP-Enforcement-Verordnung, GRUR 2014, 241, Munich: C.H. Beck
- Roffe, P. & Tesfachew, T. (2001), The Unfinished Agenda, in S. Patel, P. Roff & A. Yusuf (Eds.), International Technology Transfer: The Origins and Aftermath of the United Nations Negotiations on a Draft Code of Conduct, p. 381, The Hague: Kluwer Law International
- Roffe, P. (2014), Intellectual Property Chapters in Free Trade Agreements: Their Significance and Systematic Implications, in J. Drexl et al. (Eds.), EU Bilateral Trade Agreements and Intellectual Property: For Better or Worse, p. 10, Heidelberg: Springer
- Roffe, P. (2015), Overview of the Normsetting Developments in the New TRIPS World, in A. Autenne et al. (Eds.), Droit, Économie et Valeurs, Hommage à B. Remiche, p. 673, Bussels: Larcier
- Saez, C. (2009), Crisis at WIPO over Development Agenda, Overall Objectives in Question, IP Watch of 24 May 2009, available at: http://www.ip-watch.org/2014/05/24/crisis-at-wipo-over-development-agenda-overall-objectives-in-question/
- Sampoth, P.G. & Roffe, P. (2012), Unpacking the International Technology Transfer Debate: Fifty Years and Beyond, ICTSD Discussion Paper, Geneva: ICTSD
- Santa Cruz, M. (2007), Intellectual Property Provisions in European Union Trade Agreements, ICTSD Issue Paper, Geneva: ICTSD
- Scotchmer, S. (2004), Innovation and Incentives, Cambridge: The MIT Press
- Sell, S. (2011), Everything Old is New Again: The Development Agenda Then and Now, 3 WIPO J. 2011, 17, Geneva: WIPO
- Senti, R. (2000), WTO System und Funktionsweise der Welthandelsordnung, Zurich: Schulthess Senti, R. (2013), Regionale Freihandelsabkommen, Zurich/Berlin: BWV
- Seuba, X. (2013), Checks and Balances in the Intellectual Property Enforcement Field: Reconstructing EU Trade Agreements, in Ch. Geiger (Ed.), Constructing European Intellectual Property, p. 409, Cheltenham: Edward Elgar
- Sinn, H.-W. (2005), Basar-Ökonomie Deutschland Exportweltmeister oder Schlußlicht?, 58 (6) Ifo-Schnelldienst p.3, Munich: CESifo
- Sinn, H.-W. (2006), Der pathologische Exportboom, 59(1) Ifo-Schnelldienst p. 3, Munich: CESifo Slade, A. (2011), Articles 7 and 8 of the TRIPS Agreement: A Force for Convergence with the International IP System, 14 J.W. Intell. Prop. 2011, 413, Hoboken: John Wiley & Sons
- Somaya, D. & Teece, D. (2008), Patents, Licensing, and Entrepreneurship: Effectuating Innovation in Multi-Invention Contexts, in D. Teece (Ed.), The Transfer and Licensing of Knowhow and Intellectual Property, p. 123, Singapore: World Scientific
- Stoll, P.-T. & Schorkopf, F. (2006), WTO World Economic Order, World Trade Law, Leiden: Martinus Nijhoff

Stoll, P.-T. (1994), Technologietransfer – Internationalisierungs- und Nationalisierungstendenzen, Berlin: Springer

- Straus, J. (2012), A Marriage of Convenience: World Economy and Intellectual Property from 1990 to 2012, 40 AIPLA Qu. J. 633 (2012), Arlington: American Intellectual Property Law Association
- Trebilcock, M., Howse, R. & Eliason, A. (2013), The Regulation of International Trade, 4th ed., London: Routledge
- Tritton, G. (2008), Intellectual Property in Europe. 3rd ed., London: Sweet & Maxwell
- U.S. Department of Commerce, National Economic Council (2012), The Competitiveness and Innovative Capacity of the United States
- Ullrich, H. (1988), Kooperative Forschung und Kartellrecht eine Kritik der Wettbewerbsaufsicht über die Forschungsgemeinschaften in den USA, der EWG und der Bundesrepublik Deutschland, Heidelberg: Verlag Recht und Wirtschaft
- Ullrich, H. (1996), GATT, Industrial Property Protection, Fair Trade and Development, in Beier, F.-K. & Schricker, G. (Eds.), From GATT to TRIPS, p. 127, Weinheim: VCH
- Ullrich, H. (2009), Propriété intellectuelle, concurrence et régulation Limites de protection et limites de contrôle, R.I.D.E. 2009, 399, Brussels: de Boeck
- Ullrich, H. (2011), Intellectual Property, Access to Information, and Antitrust: Harmony, Disharmony and International Harmonization, in R. Dreyfuss et al. (Eds.), Expanding the Boundaries of Intellectual Property, p. 365, Oxford: Oxford University Press
- Ullrich, H. (2012), Gewerblicher Rechtsschutz und Urheberrecht im Binnenmarkt, in U. Immenga & E.J. Mestmäcker (Eds.), Wettbewerbsrecht Band 1, Teil 2. 5th ed., Munich: C.H. Beck
- Ullrich, H. (2012), Intellectual Property: Exclusive Rights for a Purpose the Case of Technology Protection by Patents and Copyright, in K. Klafkowska – Wasniowska et al. (Eds.), Problemy Polskiego i Europejskiego Prawa Priwatnego (Contributions in Honour of M. Kepinski), p. 425, Warsaw: Wolters Kluwer Polska
- Ullrich, H. (2014), Compulsory Licenses Under Patent Law: European Concepts, in W. Kaal et al. (Eds.), Festschrift Chr. Kirchner, p. 399, Tübingen: Mohr Siebeck
- UNCTAD (1997), The TRIPS Agreement and Developing Countries, UNCTAD/ITE/1 of May 1997, New York/Geneva: United Nations
- UNCTAD (2011), World Investment-Report 2011 Non-Equity Modes of International Production and Development, New York: United Nations Publications
- UNCTAD (2012), Technology and Innovation Report 2012 Innovation, Technology and South-South Collaboration, New York: United Nations Publications
- UNCTAD (2013), World Investment Report 2013 Global Value Chains: Investment and Trade for Development, New York: United Nations Publications
- UNCTAD-ICTSD (2005), Resource Book on TRIPS and Development, New York: Cambridge University Press
- Van den Bossche, P. (2008), Looking for Proportionality in WTO Law, 35 Leg. Iss. Econ. Integr. 2008, 283, Alphen aan den Rijn: Wolters Kluwer
- Van Overwalle, G. (2011), Policy Levers Tailoring Patent Law to Biotechnology: Comparing U.S. and European Approaches, 1 U.Cal. Irvine L. Rev. 435 (2011), Irvine: University of California
- Varju, M. & Sandor, J. (2012), Patenting Stem Cells in Europe: The Challenge of Multiplicity in European Union Law, 49 CML Rev. 2012, 1007, Alphen aan den Rijn: Wolters Kluwer
- Vermulst, E. et al. (1988), Counterfeiting in GATT, the EEC and the Netherlands, Searching for New Remedies, Leg. Iss. Eur. Integr. 1988, 61, Alphen aan den Rijn: Wolters Kluwer
- Voland, Th. (2007), Verbraucherschutz und Welthandelsrecht, Munich: C.H. Beck
- Wakely, J. (2011), Compulsory Licensing under TRIPS: An Effective Tool to Increase Access to Medicines in Developing and Least Developed Countries?, 33 E.I.P.R. 2011, 299, London: Sweet & Maxwell

Wakely, J. (2011), The Impact of External Factors on the Effectiveness of Compulsory Licensing as a Means of Increasing Access to Medicines in Developing Countries, 33 E.I.P.R. 2011, 756, London: Sweet & Maxwell

Wallot, M. (2015), The Proportionality Principle in the TRIPS Agreement, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles (p. 213), Heidelberg: Springer (this volume)

Watal, J. (2011), From Punta del Este to Doha and Beyond: Lessons from the TRIPS Negotiation Processes, 3 WIPO J. 2011, 24, Geneva: WIPO

Weber, G. et al. (2007), Patentstrategien, Cologne: Heymanns

Weinstock, N. (2009), The Development Agenda, Oxford: Oxford University Press

WIPO (2010), Standing Committee on the Law of Patents, Exclusions from Patentability and Exceptions and Limitations to Patentee's Rights, SCP/15/3, Geneva: WIPO

WIPO (2012), World Intellectual Property Report 2011 – The Changing Face of Innovation, Geneva: WIPO

WIPO (2014), World Intellectual Property Indicators 2013, Geneva: WIPO

WTO (2009), World Trade Report 2008 - Trade in a Globalizing World, Geneva: WTO

WTO (2013), World Trade Report 2013 – Factors Shaping the Future World Trade, Geneva: WTO WTO (2014), World Trade Report 2014 – Trade and Development: Recent Trends and the Role of the WTO, Geneva: WTO

Young, J.A. et al. (1985), Global Competition – The New Reality, Vol. II of the Report of the President's Commission on Industrial Competitiveness, Washington D.C.: U.S. Government Printing Office

Yu, P.K. (2011), Are Developing Countries Playing a Better Game?, 16 UCLA J. Int'l L. & Foreign Aff. 311 (2011), Los Angeles: UCLA School of Law

Yu, P.K. (2013), The Rise of China and Other Middle Intellectual Property Powers, Drake Univ. School of Law, Occasional Papers in Intellectual Property Law No. 8, Des Moines: Drake University School of Law

Part II TRIPS as a Legal Framework: Which Geometry?

From Minimum Standards to Maximum Rules

Annette Kur

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Abstract Partly born out of frustration about the incessant demands for increased intellectual property (IP) protection in the post-TRIPS era, calls for the introduction of mandatory limits for such protection have become vibrant over the last decade, leading to a number of initiatives and, recently, to the adoption of the first international IP treaty that is primarily geared towards limitations and exceptions. This chapter gives an overview on the background and current state of the movement towards maximum rules, discusses the potential benefits and drawbacks of the approach, the relationship with obligations resulting from previous IP treaties, and possible ways forward.

Prof. Dr. Dr. h.c. Annette Kur is Senior Research Fellow at the Max Planck Institute for Innovation and Competition, Munich, and Associate Professor at the University of Stockholm.

A. Kur (⊠)

Max Planck Institute for Innovation and Competition, Munich, Germany e-mail: annette.kur@ip.mpg.de

1 Introduction

Since its inception international intellectual property (IP) law set out on a one-way course—forward to more and stronger protection. That dynamism evolves from the "minimum rights" approach underlying all major IP conventions: the aim is to create a "floor" which member states may exceed, but from which they cannot retract.

For the longest time in the history of IP, the appropriateness of that approach was not put into doubt. Prescribing minimum protection, in combination with the fundamental principle of national treatment, appeared as the only effective remedy against the otherwise rampant maltreatment of foreign creators' and inventors' interests. It is well known that e.g. publishing or translating books by foreign authors (or books first published in another country) was considered normal by many states for the better part of the nineteenth century—and sometimes well into the twentieth. This was true also even for states that nowadays tend to be the most ardent defenders of IP protection. Equally dissatisfactory was the situation with regard to patents that were eagerly copied in other countries, with the aim of developing and strengthening domestic industries at the expense of foreign interests. Such opportunistic behaviour only came to an end when the members of the Paris and Berne Conventions agreed to ban the discrimination of foreign nationals and their achievements, and to grant them certain minimum rights to rely on.

Regarding the contents of those rights, the focus traditionally was placed on the problems typically encountered by right holders seeking to exploit their rights abroad. This is particularly true for the way in which the Paris Convention addresses the protection of industrial property rights. A paradigmatic example for

¹ Such as the USA which was characterized by Senator Jonathan Chace, promoter of the 1891 Copyright Act, as "the Barbary coast of literature" and its people as "the buccaneers of books"; Golan v. Holder, 609 F. 3d 1076 (10th Cir. 2010), fn. 2, quoting from S. Rep. No. 622, 50th Cong., 1st Sess., p. 2. A well-known episode from the period preceding the legislation concerns the complaints by Charles Dickens over the income lost through cheap unauthorized reprints of his works, escalating during Dickens' US reading tour in 1842 and leading to both sides bitterly begrudging each other's conduct. See also J. Ginsburg & J.M. Kernochan (2004), One Hundred and Two Years later: The US joins the Berne Convention, in R. Merges & J. Ginsburg (Eds.), Foundations of Intellectual Property, pp. 298 et seq.

² Accounts of those practices are many; see e.g. J. Lerner (1999), 150 Years of Patent Protection, NBER Working Paper Series Vol. 7478 of August 1999, p. 15; E. Schiff (1971), Industrialization without National Patents – The Netherlands, 1869–1912, Switzerland, 1850–1907, in particular at pp. 85 et seq.; B.Z. Khan & K.L. Sokoloff (2009), Historical Perspectives on Patent Systems in Economic Development, in N. Weinstock Netanel (Ed.), The Development Agenda, pp. 232 et seq.

³ Paris Convention for the Protection of Industrial Property (1883; last revised in Stockholm 1967); Berne Convention for the Protection of Literary and Artistic Works (1886; last revised in Paris 1971).

that approach is presented by the priority principle⁴ and its objective to grant a privileged and secure position to persons first filing an application for protection of industrial property rights in a particular member state of the Paris Union (in most cases their own state of domicile) before seeking registration abroad.⁵ Concerns regarding cross-border trade also account for the "telle-quelle" principle enshrined in Article 6^{quinquies}, or for protection of well-known, unregistered marks under Article 6^{bis} Paris Convention. On the other hand, legislatures remained basically free to regulate issues of primarily domestic concern, such as protection requirements for patents or trademarks as well as the general scope and contents of those rights. The Berne Convention differs from that structure by providing for a general definition of the notion of a work⁷ and by listing individual modes of exploitation that must be reserved to the author. However, also there the focus at least initially laid on exploitation modes that were particularly relevant on foreign markets, such as translation, performance or broadcasting, whereas the core right of reproduction was only included in the Berne Convention at a rather late stage, at the revision conference of Stockholm in 1967. Also, while the list of minimum rights was expanded in the course of revision conferences held over the decades, ¹¹ Berne Members¹² remained free not to accede to the revised versions if they considered the respective enhancements of protection as too ambitious for their own situation.

The picture has thoroughly changed in the post-TRIPS world. First and most importantly TRIPS has resulted in an unprecedented level of substantive harmonisation of IP law. International IP law began to "reach behind the borders" by regulating matters that were previously considered as presenting primarily domestic concerns. In addition to that, TRIPS obliges all WTO members to accede

⁴ Article 4 Paris Convention. Due to the priority principle a person filing an application for an industrial property right in a Paris Union member state can invoke an earlier filing date from another member state if the subsequent filing takes place within 12 months (patents, utility models) or six months (trademarks, industrial design) from the earlier date.

⁵ Obviously the principle makes sense primarily for countries following a "first to file" approach to registered rights. It is indeed so that both the Paris and the Berne Convention are heavily influenced by the concept underlying industrial property resp. copyright protection in civil law (continental European) countries.

⁶ Meaning that if a trademark is validly registered in its country of origin the proprietor is entitled to request that the mark be registered "as is" in other member states of the Paris Union, unless the registration is rejected for one of the grounds listed in part B of the provision.

⁷ Article 2 Berne Convention provides an open catalogue of works for which protection must be granted, while leaving it to the Member States to define the threshold for protection.

⁸ Article 8 Berne Convention.

⁹ Article 10 Berne Convention.

¹⁰ Article 11^{bis} Berne Convention.

¹¹ Berne Convention revision conferences where held in Berlin (1908), Berne (1914), Rome (1928), Brussels (1948), Stockholm (1967) and Paris (1971). The Paris Convention was revised at Brussels (1900), Washington (1911), The Hague (1925), London (1934), Lisbon (1958) and Stockholm (1967).

¹² The same applies to the Paris Convention.

to the most advanced version of the Paris and Berne Conventions, ¹³ thus providing for an elevated protection threshold even where TRIPS itself is silent. As is no secret those profound changes were not triggered by a common understanding of needs to adapt the structure of international IP law to a globalized economy; they were rather induced by the promise of improved trade conditions that the industrialized part of the world employed as a lever to impose enhanced protection standards on threshold and developing countries. ¹⁴ Abiding by those standards was declared by proponents of strong IP protection as having an ultimately beneficial effect, as it would help attracting more foreign direct investment and thereby foster economic growth. ¹⁵ Furthermore, TRIPS created the expectation that implementing the rather ambitious package would satisfy foreign requests for stronger protection for the decades to come, and that the resilient framework of a multinational agreement would grant immunity against further unilateral pressures ¹⁶ to go beyond the level of protection thus achieved.

However, not only did the hopes for economic prosperity fail a number of countries, in particular those hovering in precarious conditions anyway¹⁷; it also soon became obvious that TRIPS only represented the starting point for more substantial demands proffered in the framework of trade negotiations entertained by the leading industrialized regions of the world.¹⁸ In that situation, calls for an "antidote" became louder, and the concept of mandatory "ceilings" or "substantive maxima" was gradually established as a new paradigm in the international IP

¹³ Articles 2(1) and 9(1) TRIPS.

¹⁴ For an in-depth account of the history of TRIPS see D. Gervais (2012), The TRIPS Agreement – Drafting History and Analysis; ICTSD/UNCTAD (2005), Resource Book on TRIPS and Development.

¹⁵ See e.g. R.M. Sherwood (1993), Why a Uniform Intellectual Property System Makes Sense for the World, in M.B. Wallerstein, M.E. Mogee & R.A. Schoen (Eds.), Global Dimensions of Intellectual Property Rights in Science and Technology, p. 75; see also J. Straus & N. Klunker (2007), Harmonisierung des internationalen Patentrechts, GRUR Int. 2007, 97. For a comprehensive study resulting in a more differentiated view see K. Maskus (2000), Intellectual Property Rights in the Global Economy.

¹⁶ In particular measures taken by the USTR based on Sec. 301 of the U.S. Trade Act of 1974, 19 U.S.C. § 2411. Further on the effect of such measures on the TRIPS negotiations see R. Dreyfuss & G.B. Dinwoodie (2012), A Neofederalist Vision of TRIPS, p. 33.

 $^{^{17}}$ This is also shown in the analysis by K. Maskus (2000), Intellectual Property Rights in the Global Economy, Ch. 5.

¹⁸ See in particular S. Sell (2010), The Global IP Upward Ratchet, Anti-Counterfeiting and Piracy Efforts: The State of Play, PIJIP Research Paper No. 15 of October 2010. See also R. Dreyfuss & G.B. Dinwoodie (2012), A Neofederalist Vision of TRIPS, p. 178, with reference to P. Drahos (2001), BITs and BIPs – Bilateralism in Intellectual Property, 4 J. W. Intell. Prop. 2001, 791.

¹⁹ As far as can be seen, the term "substantive maxima" and the concept to which it refers was first used by R. Dreyfuss (2004), TRIPS – Round II: Should Users Strike Back, 71 U. Chi. L. Rev. 2004, 27; see also G.B. Dinwoodie (2006), The International Intellectual Property Law System: New Actors, New Institutions, New Sources, 10 Marquette Intell. Prop. L. Rev. 2006, 214. In the following, the terms "ceilings" and "substantive maxima" are used alternately.

discourse exploring feasible ways to reverse or at least halt the trend towards everincreasing minimum standards.²⁰

This chapter taps into that discourse. After briefly reviewing the status quo with regard to international treaties and treaty proposals containing elements of ceilings, a number of aspects are considered that are of relevance for the making of maximum norms.

2 Ceilings in Current and Future IP Law

2.1 The Berne and Paris Conventions; TRIPS

As pointed out above, the concept of ceilings is basically alien to the traditional way of norm-making in international IP law, which rather relies on the stipulation of minimum rights. Nevertheless, some rules can be identified even in the traditional framework of IP Conventions that seem to impose certain limits to protection. Thus, the Berne Convention, TRIPS and the WIPO Treaties of 1996 all exclude certain subject matter from copyright protection, such as news of the day (Article 2 (8) Berne Convention), or ideas and mere data (Articles 9(2) and 10(2) TRIPS; Articles 2 and 5(1) 2nd sentence WCT). However, it is debateable whether those rules make exclusion of such subject matter mandatory, or whether they only clarify that the *obligations* under the respective Conventions do not extend to such items. Regarding the Berne Convention, the latter understanding appears at least arguable. However, the intention underpinning the exclusion rules in TRIPS seems to

²⁰ The concept of maximum standards and its potential implementation in the different areas of IP law figured as a central issue in the project "IP in Transmission" (IPT) that resulted in the book by A. Kur & M. Levin (2011), IP in a Fair World Trade System; see also A. Kur & M. Levin (2014), The IPT Project – Proposals to Reform the TRIPS Agreement, in G. Ghidini, R.J.R Peritz & M. Ricolfi (Eds.), TRIPS and Developing Countries – Towards a new World Order?, pp. 167 et seq.

²¹ B. Hugenholtz & R. Okediji (2008), Conceiving an International Instrument on Limitations and Exceptions to Copyright, Final – Report of 6 March 2008; see also A. Kur & H. Grosse Ruse-Khan (2011), Enough is Enough – The Notion of Binding Ceilings in International Intellectual Property Protection, in A. Kur & M. Levin (Eds.), Intellectual Property in a Fair World Trade System, pp. 378 et seq.

²² See J. Blomqvist (2011), The Consistency of Mandatory Exceptions Treaties with International Conventions in the Field of Copyright and Related Rights (paper presented at the 2011 ALAI Congress in Dublin), arguing against A. Kur & H. Grosse Ruse-Khan (2011), Enough is Enough – The Notion of Binding Ceilings in International Intellectual Property Protection, in A. Kur & M. Levin (Eds.), Intellectual Property in a Fair World Trade System, with reference to the (French, authoritative) wording of the provision and the legislative history; however, J. Ginsburg & S. Ricketson (2006), International Copyright and Neighbouring Rights, para. 6.111, argue with regard to both the exclusion of news of the day and the quotation right that although member states may be free to grant unrestricted protection to their own nationals, the Berne Convention requires "that member states preserve the freedom of these excluded elements when the works that contain them traverse borders".

have been more seriously geared towards a mandatory limitation, at least in the sense that the provisions express a common understanding of what should definitely remain outside the realm of copyright protection.²³ This view imposes itself in particular regarding the fundamental importance of the idea/expression dichotomy, but also considering the strong misgivings against protection of mere data.

Apart from excluded subject matter, the citation right in Article 10(1) Berne Convention is widely viewed as representing the sole example so far for a mandatory limitation of the protection conferred by copyright.²⁴ Regarding industrial property, a specific limitation is found in Article 5^{ter} Paris Convention which ensures freedom of international traffic by declaring inadmissible the enforcement of patent rights against devices installed on, or needed for repair of, vessels, aircraft and other vehicles temporarily in transit.²⁵ A ceiling character can arguably also be claimed for certain provisions in the TRIPS section on border measures.²⁶ In a more general fashion TRIPS Article 1(1) 2nd sentence sets forth that although Members are free to grant broader protection than what is enshrined in Part II of the Agreement, the protection thus granted must not "contravene the provisions of [TRIPS]".²⁷

Somewhat surprisingly, mandatory limitations and other maximum rules have also found their way into bilateral trade agreements such as for instance the

²³ See SAS Institute Inc v. World Programming Ltd. [2010] EWHC 1829 (Ch), para. 204, where the judge (Lord Justice Jacob) argued that computer program language must remain excluded from Copyright due to Article 2 WCT while the CJEU confirmed the exclusion in ECJ, SAS Institute, C-406/10, EU:C:2012:259, without commenting on the WCT. It is another question to what extent protection of such items under other regimes (e.g., sui-generis protection of mere data) would be considered as violating TRIPS. This depends in particular on the interpretation of Article 1(1) 2nd sentence TRIPS; see A. Kur & H. Grosse Ruse-Khan (2011), Enough is Enough – The Notion of Binding Ceilings in International Intellectual Property Protection, in A. Kur & M. Levin (Eds.), Intellectual Property in a Fair World Trade System, p. 395.

²⁴ This interpretation as well is not uncontested; see J. Blomqvist (2011), The Consistency of Mandatory Exceptions Treaties with International Conventions in the Field of Copyright and Related Rights (paper presented at the 2011 ALAI Congress in Dublin), favouring a different interpretation; for a different opinion (cogent character of quotation rule) see J. Ginsburg & S. Ricketson (2006), International Copyright and Neighbouring Rights.

²⁵ The same applies with regard to parts of aircraft protected by patents or industrial design, according to Art. 27 of the Convention on Civil International Aviation (Chicago Convention) 1944.

²⁶ See e.g. Article 41(1), 52 TRIPS. On the possible implications of Article 52 for the possibility to seize goods in transit see H. Grosse Ruse-Khan & Th. Jaeger (2009), Policing Patents Worldwide – EC Border Measures against Transiting Generic Drugs under EC and WTO Intellectual Property Regimes, 40 IIC 2009, 533–34. India and Brazil have invoked Articles 52 and 41(1) TRIPS in their complaints to the WTO about measures taken by Dutch customs authorities against medicaments in transit; see Request for Consultation by India, European Union and a Member State seizure of generic drugs in transit, WT/DS408/1 (May 19, 2010), at 3 and corresponding request by Brazil, WT/DS409/1. at 4.

²⁷ The potential of that clause as a door-opener for maximum standards is thoroughly explored by H. Grosse Ruse-Khan (2009), Time for a Paradigm Shift? Exploring Maximum Standards in International Intellectual Property Protection, 1 Trade, L. and Dev. 2009, 66 et seq.

agreement concluded between the European Communities and the CARIFORUM states. Finally, at least theoretically, external rules may also constitute ceilings. This concerns in particular the norms enshrined in human rights instruments, such as the right to health, food, and education errain limits may also ensue from competition law. On the state of the competition law.

2.2 The Marrakesh Treaty

While the number and practical relevance of ceiling rules remained sparse throughout the past, in recent times increased political and scholarly efforts to safeguard the interest of users and the public at large have engendered a number of initiatives. These are primarily geared towards limitations and exceptions (sometimes apostrophized as "users' rights" its claim to exclusivity where it interacts with countervailing interests and values to which, under certain circumstances, precedence must be accorded.

In the WIPO Standing Committee on Copyright and Related Rights (SCCR), limitations and exceptions became part of the regular working programme through a proposal made in 2008 by Brazil, Chile, Nicaragua and Uruguay.³² In the same year, the SCCR took up for discussion a proposal tabled by the World Blind Union

²⁸ EC – CARIFORUM Economic Partnership Agreement (EPA) signed on 15 October 2008. For more details concerning the ceiling rules contained in the EPA provisions on trademarks (fair use of descriptive terms), industrial designs (exclusion of functional features from protection) and competition (prohibition of competition distorting use of intellectual property), see A. Kur & H. Grosse Ruse-Khan (2011), Enough is Enough – The Notion of Binding Ceilings in International Intellectual Property Protection, in A. Kur & M. Levin (Eds.), Intellectual Property in a Fair World Trade System, p. 383.

²⁹ The literature on the topic is very rich. For an overview, see e.g. P.K. Yu (2007), Reconceptualizing Intellectual Property Interests in a Human Rights Framework, 40 UC Davis L. Rev. 2007, 1039; Ch. Geiger (2006), 'Constitutionalizing' Intellectual Property Law? The Influence of Fundamental Rights on IP in the European Union, 37 IIC 2006, 371; see also P. Torremans (2008), Intellectual Property and Human Rights (enhanced edition of Copyright and Human Rights). Although the superior dignity of Human Rights norms as compared to trade regulations is basically uncontested, this will not frequently lead to Human Rights norms forming an absolute barrier to protection of intellectual property rights, mainly for structural reasons, concerning the degree of specificity of the respective regulations.

 $^{^{30}}$ See Max Planck Institute (2013), Copyright, Competition and Development (Report mandated by WIPO).

³¹ Employing the term "users' rights" isn't always a fortunate choice because its correctness may depend on the legal system in relation to which it is applied. Notwithstanding the details, however, it would appear justified to talk about users' rights in a situation when legal safeguards are installed in order to ensure that use can actually be made, i.e. when the right holder is legally obliged to provide access to content otherwise locked through technical protection measures, and when the permission to use cannot be abrogated by contract; see also below.

³² Standing Committee on Copyright and Related Rights, SCCR/16/2 of 17 July 2008.

(WBU)³³ for a Treaty for Improved Access for Blind, Visually Impaired and other Reading Disabled Persons to Published Works.³⁴ After 5 years of negotiations, the Treaty was concluded in Marrakesh on 27 June 2013, under the name of Marrakesh Treaty on Accessible Format Copies for the Visually Impaired (Marrakesh Treaty).³⁵ In spite of its rather limited subject,³⁶ it received wide recognition and acclaim as the first international treaty in the area of intellectual property whose primary aim is to confine instead of reinforce the exclusive position of right holders.³⁷ The Treaty has been endorsed by a fairly high number of signatories, including the US, the EU, and most of its Member States.³⁸ It will enter into force 3 months after having been ratified by 20 parties eligible to become members (Article 18 Marrakesh Treaty).³⁹ It is generally expected that the Treaty will attract, in due time, a sizeable number of accessions.

2.3 Further Initiatives

2.3.1 Copyright

The seriousness of the "book famine" among blind and visually impaired people to which the Marrakesh Treaty is meant to respond is not doubted by

³³ Proposal by Brazil, Ecuador and Paraguay, Relating to Limitations and Exceptions: Treaty Proposed by the World Blind Union (WBU), SCCR/18/5 of 23 October 2008.

³⁴ M.J. Ficsor (2013), Commentary on the Marrakesh Treaty on Accessible Format Copies for the Visually Impaired, Copyright See-Saw of 11 October 2013; an account of the history of the negotiations is given by A. Scheinwald (2012), Who Could Possibly Be Against a Treaty for the Blind, 22 Fordham Intell. Prop. Media & Ent. L.J. 2012, 445.

³⁵ M.J. Ficsor (2013), Commentary on the Marrakesh Treaty on Accessible Format Copies for the Visually Impaired, Copyright See-Saw of 11 October 2013. Introduction para. 19 emphasizes that the title shows that, in contrast to other international copyright treaties, the Marrakesh treaty is "format-centric", thus having an "exceptional and unique objective and subject matter".

³⁶ For a more far-reaching initiative which is equally centred on substantive maxima in copyright (and patent) protection, and even included mandatory limitations regarding the extension in time, see Draft Treaty on Access to Knowledge (A2K) of 9 May 2005.

³⁷ See e.g. P.D. Harpur & N.P. Suzor (2013), Copyright Protections and Disability Rights: Turning the Page to a New International Paradigm, 36 UNSW L.J. 2013, 745; for the echo on blogs see e.g. V. Franz, The Miracle in Marrakesh: Copyright Reform to End the "Book Famine", Open Society Foundation of 28 June 2013; C. Saez (2013), Over 50 Countries Sign Marrakesh Treaty On Copyright Exceptions And Limitations For The Blind, Intellectual Property Watch of 1 July 2013.

³⁸ For an actual account of the state of accessions and membership to the Marrakesh Treaty see WIPO-Administered Treaties, available at http://www.wipo.int/treaties/en/ShowResults.jsp? lang=en&treaty id=843.

³⁹ Until this time (4 August 2015) the Treaty has been ratified by 7 countries (Argentina, El Salvador India, Mali, Mexico, Paraguay and Uruguay), while accession was declared by Singapore and the United Arab Emirates.

⁴⁰The expression was allegedly coined by William Rowland, former president of the WBU; A. Scheinwald (2012), Who Could Possibly Be Against a Treaty for the Blind, 22 Fordham Intell. Prop. Media & Ent. L.J. 2012, 448, fn. 2.

anyone. 41 Nevertheless, there was considerable reluctance at first among book producing countries and the relevant industries to promulgate a treaty with binding obligations instead of addressing the matter by soft law. That reluctance was motivated not least by the fear that the Marrakesh Treaty would operate as a door-opener for more demands of the same kind, 42 meaning that WIPO's activities would be increasingly bent on preparing and negotiating treaties on mandatory limitations and exceptions instead of focusing on the strength and efficient enforcement of IP rights, as right holders would rather have it. Indeed the next treaty proposal has already been tabled, this time concerning limitations and exceptions for libraries and archives (proposed IFLA Treaty, hereinafter: IFLA-P). 43 In its content, that proposal is more far-reaching than the Marrakesh Treaty, seeking to allow basically any activity that is useful for the tasks fulfilled by libraries and archives. 44

Less incisive than that, but covering a wider range of issues, is the initiative prompted by an academic proposal currently elaborated under the aegis of the Max Planck Institute for an International Instrument on Copyright Limitations and Exceptions (IICLE). The draft text intends to set up an overall framework of limitations and exceptions that are considered necessary for a copyright system functioning to the benefit of right holders as well as the other stakeholders and the public at large. The prospects for acceptance of any of the two proposals are uncertain at this time; nevertheless, they are used in the following, together with the Marrakesh Treaty, as major examples for the potential regulatory design of ceiling treaties. 45

⁴¹ According to the WBU's press release on 20 April 2014 announcing the conclusion of the Marrakesh VIP Treaty, "only some 7 % of published books are ever made accessible (in formats such as Braille, audio and large print) in the richest countries, and less than 1 % in poorer ones". It would be short-sighted, however, to blame the situation primarily on copyright, in particular as the figures also include material that is in the public domain.

⁴² A. Scheinwald (2012), Who Could Possibly Be Against a Treaty for the Blind, 22 Fordham Intell. Prop. Media & Ent. L.J. 2012, 487 et seq.; P.D. Harpur & N.P. Suzor (2013), Copyright Protections and Disability Rights: Turning the Page to a New International Paradigm, 36 UNSW L.J. 2013, 761 et seq.; see also the emphasis placed by proponents of traditional copyright normmaking such as M.J. Ficsor (2013), Commentary on the Marrakesh Treaty on Accessible Format Copies for the Visually Impaired, Copyright See-Saw of 11 October 2013, on the exceptional and unique character of the treaty.

⁴³ IFLA is the International Federation of Library Associations and Institutions. See Treaty Proposal on Limitations and Exceptions for Libraries and Archives Version 4.4, IFLA of December 2013.

⁴⁴For the current situation in regards of limitations and exceptions in favour of libraries and archives see K. Crews (2008), WIPO Study on Copyright Limitations and Exceptions for Libraries and Archives, SCCR/17/2 of 26 August 2008.

⁴⁵ Another example for a rather far-reaching initiative centered on substantive maxima is the Draft Treaty on Access to Knowledge (A2K) of 9 May 2005. The draft is broader than the previously mentioned initiatives in that it covers copyright as well as patent law; furthermore, it not only addresses limitations and exceptions in the narrow sense, but also other aspects such as limitations regarding (retroactive) extension of copyright duration. Furthermore, catalogues of mandatory

2.3.2 Other Areas of IP

While the current discourse on mandatory limitations and exceptions is concentrated on copyright, WIPO's efforts to investigate limitations and exceptions also cover patent law. Following an extensive inventory of limitations of patentee's rights, ⁴⁶ the Standing Committee on Patent Law (SCP) has put on its agenda the discussion of several types of limitations, such as non-commercial use, ⁴⁷ experimental use and/or scientific research, ⁴⁸ extemporaneous preparation of medicines, ⁴⁹ prior use ⁵⁰ and the use of articles on foreign vessels, aircrafts and land vehicles. ⁵¹ Whether this endeavour may lead to further steps such as the adoption of a Joint Recommendation or even to an international treaty is unclear at this moment.

Furthermore, an element of mandatory restriction is involved in the discussions on the disclosure of origin of biological resources used in subject matter for which patents are sought. Although no ceilings are envisaged in the sense of protection being limited or excluded per se, proposals aired in this context might indirectly impinge on the possibility to obtain a valid right. Finally, rules setting mandatory limits to private exploitation of new technologies are in the focus of current debates on the implications of the IP regime for ecology-friendly innovation in the wake of climate change.

limitations and exceptions in all areas of IP law have been elaborated in the framework of the IPT project (supra, fn. 20); see A. Kur & M. Levin (2011), IP in a Fair World Trade, proposed amended versions of Articles 13, 14(6), 17, 26(2) and 30, with explanations at pp. 558–564, 568–574, 575–576, 584–596; for a brief account of the mandatory limitations proposed see A. Kur & M. Levin (2014), The IPT project – Proposals to Reform the TRIPS Agreement, in G. Ghidini, R.J.R. Peritz & M. Ricolfi (Eds.), TRIPS and Developing Countries – Towards a new World Order?, pp. 177 et seq. See Text of the Proposals, Agreement on Trade-Related Aspects of Intellectual Property Rights of May 2011.

⁴⁶ See L. Bently et al. (2010), Experts' Study on Exclusions from Patentable Subject Matter and Exceptions and Limitations to the Rights, SCP/15/3 of 2 September 2010.

⁴⁷ Exceptions and Limitations to Patent Rights: Private and/or Non Commercial Use, SCP/20/3 of 15 November 2014.

⁴⁸ Exceptions and Limitations to Patent Rights: Experimental Use and/or Scientific Research, SCP/20/4 of 18 November 2013.

⁴⁹ Exceptions and Limitations to Patent Rights: Extemporaneous Preparation of Medicines, SCP/20/5 of 9 October 2013.

⁵⁰ Exceptions and Limitations to Patent Rights: Prior Use, SCP/20/6 of 21 October 2013.

⁵¹ Exceptions and Limitations to Patent Rights: Use of Articles on Foreign Vessels, Aircrafts and Land Vehicles, SCP/20/7 of 16 October 2013.

⁵² The topic forms part of the program of the WIPO Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore. For an evaluation of the legal issues involved see WIPO (2004), Technical Study on Patent Disclosure Requirements related to Genetic Resources and Traditional Knowledge.

⁵³ See e.g. Communication on a Proposal to Amend TRIPS, WT/GC/W/564 of 31 May 2006 (proposal for Art. 29^{bis} TRIPS).

⁵⁴ See UN Framework Convention on Climate Change (UHFCC), Ad Hoc Working Group on Cooperative Long-term Action under the Convention, FCCC/AWGLCA/2009/INF.1 of 22 June 2009, pp. 184–186.

3 Strategic Considerations

3.1 Background and Motives

Traditional IP conventions are aimed at protecting foreign right holders. Only they—the "beneficiaries"—are entitled to claim at least the same, or even better rights than those granted to nationals of the protecting country. In other words, the conventions "do not care" about the situation under domestic law as long as the rights of foreigners are duly observed. If the fact that legislatures are keen to avoid negative discrimination of their own citizens regularly leads to substantive harmonisation, this is a welcome side effect, but not the principal aim of the agreements.

Regarding ceiling rules, however, the traditional approach does not furnish a full explanation. For instance, it is obviously not the goal of the Marrakesh Treaty to ensure that accessible format copies are made available to blind and visually impaired people when they travel abroad. In order to make sense, the limitations and exceptions set out as ceiling rules must be binding for legislatures in the countries where the beneficiaries are actually resident. This may trigger the question why—without an obvious link to protection of *foreign* interests—an international treaty is needed at all. Why not take the more direct route of simply legislating nationally? Would it not be preferable to ensure that the existing flexibilities in that area are not (further) curtailed by international law complemented by an increasingly dense web of bilateral obligations?⁵⁵

In response to that, it is emphasized that at least with regard to the Marrakesh Treaty the main reason to conclude an international agreement instead of issuing a "robust recommendation" lies in the fact that the Treaty (just as the proposed IFLA Treaty) undertakes to ensure *cross-border exchange* of copies reproduced or otherwise made available by virtue of legal limitations and exceptions. It is true that the desired effect could, at least to some extent, have been achieved by way of national legislation: Firstly, WTO member states are basically free to determine and modulate their rules on exhaustion. Secondly, even if the exhaustion principle is of no avail for the specific issue posed here, the importing state may nevertheless,

⁵⁵ The dangers involved in that development are highlighted in H. Grosse Ruse-Khan et al. (2013), Principles for IP Provisions in Bilateral and Regional Agreements, 44 IIC 2013, 878.

⁵⁶ M.J. Ficsor (2013), Commentary on the Marrakesh Treaty on Accessible Format Copies for the Visually Impaired, Copyright See-Saw of 11 October 2013, Introduction, paras. 14, 15; A. Scheinwald (2012), Who Could Possibly Be Against a Treaty for the Blind, 22 Fordham Intell. Prop. Media & Ent. L.J. 2012, 481. It remains unclear, however, whether the option of importing copies can actually make a substantial contribution to the supply of markets that until now are badly underserved.

⁵⁷ Article 6 TRIPS.

⁵⁸ This depends inter alia on the understanding of what is meant by exhaustion: If the notion is confined to the situation that the proprietor of the right has authorized the first sale, importation of copies made under the operation of law would be illegal, even where the principle of international exhaustion applies. On this point see also below.

within the confines set forth by the three-step test (Article 13 TRIPS),⁵⁹ craft a specific limitation allowing import and distribution of protected material. However, such a unilateral approach does not meet its goals as long as the export of copies remains prohibited in book-producing countries. Establishing a functioning network of importing and exporting countries with mutual rights and obligations is therefore certainly better suited for ensuring access to the material needed.

Although certainly important, the desire to establish a solid foundation for crossborder exchange is not the only motivation for concluding ceiling treaties now and in the future. In addition to such specific, clearly trade-related issues, the drive towards internationally mandatory limitations and exceptions as a route to promote legislation that is mainly geared towards domestic concerns is fuelled by other, more general reasons. 60 Firstly, by shifting the forum from the national to the international level, chances for acceptance and success of maximum rules may be improved even vis-à-vis domestic legislatures:⁶¹ political visibility is enhanced, peer support can be aggregated, and the leveraging potential may thus become much stronger. This strategy has been employed successfully in the interest of right holders, most notably in the context of the WIPO copyright treaties of 1996 with their provisions on protection against circumvention of technological protection measures (TPMs).⁶² It is basically sound to assume that the same tactics might work when it comes to users' interests, in particular if the matter pursued is of unquestionable moral appeal, like in the case of improved access to protected content for blind and visually impaired persons.⁶³ Secondly, to agree on specific treaties or clauses with a ceiling character has a defensive effect: in an environment where the legislative freedom to provide for users' rights has become precarious, proactive measures are needed to disperse doubts about the admissibility of specific modes of conduct under the international system. Apart from that, the political message conveyed by a ceiling treaty—in particular if it is able to muster broad political support in the international community—should not be underestimated in its psychological importance: it sends a strong signal that to ensure that IP protection meets its limits is no less important than establishing a sound degree of minimum protection.

⁵⁹ On this point see below.

 $^{^{60}}$ It must be added, however, that all international IP treaties are by necessity "trade-related" to some extent, as they will always influence the way in which protected items form part of international trade flows.

⁶¹ For similar argumentation – concerning forum shifting between different organisations and institutional frameworks – see L. Helfer (2004), Regime Shifting: The TRIPS Agreement and New Dynamics of International Intellectual Property Lawmaking, 29 Yale J. Int'l L. 2004, 2.

 $^{^{62}}$ It is very questionable indeed whether the same rules would have been achievable on the national level (e.g. in the USA) without the negotiations in the international arena having been used as a lever.

⁶³ The close relationship between the Marrakesh treaty and human rights issues is obvious; see A. Scheinwald (2012), Who Could Possibly Be Against a Treaty for the Blind, 22 Fordham Intell. Prop. Media & Ent. L.J. 2012, 457 et seq.

3.2 Weaknesses

While forum shifting in the sense of elevating a specific concern to the level of international law-making may yield favorable results due to aggregated leveraging power, the success thus achieved remains without actual clout if it is not transformed into national legislative activities. In that regard, however, unforeseen obstacles may arise, depending on the domestic situation. While governments or their representatives may be ready to accept new limitations and exceptions on the international stage, especially when failing to do so would draw heavy public criticism, the decision-making processes in the national environment follow their own political dynamics, ⁶⁴ making it uncertain whether and when a treaty that was readily signed will actually be ratified and transformed into national law. 65 In the specific case of ceiling treaties, when foreign financial interests are not directly involved, it is also less likely that the legislative procedures are watched closely by other states, and that—as happens in case of treaties prescribing a higher level of protection—subtle political pressure is exerted from abroad to speed up the ratification and implementation process. It is mainly left to the domestic beneficiaries of a ceiling treaty to turn the international breakthrough into legal reality.

The lack of specific foreign interests in ensuring compliance with a ceiling treaty also accounts for certain weaknesses regarding enforcement. It is rather unlikely that states will encounter serious difficulties on the international level if their treaty obligations are not or are badly met. The consequences of such underperformance are typically not felt abroad and may therefore pass unheeded by other treaty members. The domestic communities will certainly care about the deficiencies. However, unless the treaty has direct effect under national law, the obligations incurred by the national legislature cannot be invoked before domestic courts. Possibilities to appeal to other fora are regularly lacking, or at least they will not yield the desired result, ⁶⁶ and the beneficiaries will therefore remain without redress.

Even if ceiling treaties were subject to the WTO Dispute Settlement system or similarly structured enforcement regimes, this would not change much as long as the entitlement to instigate proceedings is reserved to other member states. It is quite unlikely that states would take steps to enforce due implementation of maximum rules in another country if the benefits to be gained by such measures solely (or mainly) accrue to foreign communities. The situation would be different

⁶⁴To be clear: this is not to be criticized as such. It is a necessary and important feature of parliamentary democracies that treaties negotiated internationally must be submitted to the vote of the Parliament before they can proceed to ratification.

⁶⁵Whether that will also hamper the success of the Marrakesh treaty waits to be seen. It is not unusual that it takes several years from signature of a treaty to its ratification by a sufficient number of states to enter into force.

⁶⁶This concerns inter alia the at least theoretical possibility to instigate proceedings before supranational institutions such as the European Court of Human Rights (ECtHR): It is most unlikely e.g. that failure to properly implement the Marrakesh Treaty could be successfully invoked before that court.

only if substantial interests of a potential complainant's domestic exporting industries waiting for their chance to engage in cross-border trade were at stake or if, vice versa, a government does not perceive another possibility for satisfying urgent needs of its own population than to rely on (IP-unimpeded) production and delivery of the requested goods from other states. Having said that, it must be added that in particular the second scenario is not so unrealistic after all and may become more relevant in the future.

Finally, in order to establish a more robust way of "adding teeth" to ceiling treaties, inspiration could be drawn from the increasingly dense pattern of investment treaties that regularly involve a specific type of industry-state dispute settlement. Transposed to ceiling treaties, this would mean that beneficiaries or their organizations are endowed with a right to sue non-obliging governments before an international panel established (or appointed) for the purpose. However, as of now such schemes, though not unthinkable, are rather unlikely to materialize.

3.3 Ceiling Treaties as Proactive Defenses

The second strategic argument proffered above—regarding the potential defensive effect of international ceiling rules—could become critical *inter alia* in the framework of bilateral trade negotiations between trading partners of unequal strength. In that situation, the crucial question (and, in case of an affirmative answer, a powerful motivation for concluding ceiling treaties) would be whether obligations resulting from such treaties can offer a stronghold bolstering resistance against external pressure. Prima facie, the answer is positive; when countries have made a commitment to comply with particular limitations and exceptions, they are less likely to

⁶⁷ For a discussion of this point see A. Kur & H. Grosse Ruse-Khan (2011), Enough is Enough – The Notion of Binding Ceilings in International Intellectual Property Protection, in A. Kur & M. Levin (Eds.), Intellectual Property in a Fair World Trade System, pp. 369 et seq.

⁶⁸ For an overview see S.D. Franck (2005), The Legitimacy Crisis in Investment Treaty Arbitration: Privatizing Public International Law through Inconsistent Decisions, 73 Fordham L. Rev. 2005, 1521. The issue has drawn considerable political concern lately, within and outside the arena of IP, following the instigation of proceedings before the International Centre for Settlement of Investment Disputes (ICSID) by Philip Morris against Australia for "plain packaging" regulations, by Vattenfall against Germany for the decision to abandon atomic energy, and by Eli Lilly against Canada for allegedly overly restrictive patenting requirements.

⁶⁹ An interesting model is provided by the Optional Protocol to the Convention on the Rights of Persons with Disabilities (CRPD) that foresees the possibility for individuals or groups of individuals claiming to be victims of a violation of the CRPD by a member state to address themselves to the Committee on the Rights of Persons with Disabilities, who will then initiate consultations with the Member State concerned and eventually issue recommendations. However, also that model is "imperfect" under enforcement aspects insofar as the Committee does not have the power to issue binding decisions or sanctions. The text of the CRPD and the Optional Protocol are available at http://www.un.org/disabilities/convention/conventionfull.shtml and http://www.un.org/esa/socdev/enable/rights/convtexte.htm#optprotocol respectively.

bend to requests for unrestricted protection. Of course, however, that is no fool-proof rule: the degree of perseverance mustered by actors in charge of trade negotiations is influenced by many different factors, and, depending on the political and economic trade-off to be derived from the deal, states may be more ready in the end to renounce to a ceiling treaty than to reject the bid for a free trade agreement (FTA).

Until now, specific limitations and exceptions in copyright or other IP rights are rarely addressed in FTAs anyhow, with the exception (in particular in copyright) of general references to the three-step test. However, conflicts may become acute for instance when an FTA prohibits applying the principle of international exhaustion, whereas a ceiling treaty expressly provides for the possibility to import protected items that were lawfully marketed abroad. The property of the possibility to import protected items that were lawfully marketed abroad.

Apart from such specific issues, ceiling treaties bolster the position of their members vis-à-vis potential challenges already by fleshing out and concretizing the existing framework of IP provisions. In view of the difficulties TRIPS members face when appreciating the space available for legislative measures limiting the availability and scope of IP protection, the importance of such efforts should not be underestimated. Especially after the two WTO panel reports on the three-step test in 2000, 72 the ambiguity and restrictiveness of the panels' approach to exceptions under TRIPS arguably had a deterring effect on those (developing) countries that aim to devise new exceptions and limitations corresponding to their individual situation and level of development. From that perspective, international rules drawing a clearer picture of what can (or must) be accepted as an exception in international IP law already for that reason are useful and welcome.

3.4 "One Size Fits All" Re-launched?

3.4.1 Pitfalls to Be Avoided

Drafting and enacting ceilings involves setting mandatory rules. This triggers the concern that the policy space and flexibility of the countries bound by such a regime

⁷⁰ It has been argued that this a TRIPS- (and WCT-)plus provision because it extends the application of the three-step test to the Berne Convention that would otherwise only be subject to its own, pre-TRIPS standards. It shall not be discussed here whether that is actually correct. In any case, it is unlikely that it would make a difference in practice. At least regarding Article 11^{bis} Berne Convention the WTO-Panel in US copyright found that the possibilities granted under the provision three-step test are the same as would result from application of the three-step test; see on this point A. Kur (2011), Limitations and Exceptions under the Three-Step Test, in A. Kur & M. Levin (Eds.), Intellectual Property Rights in a Fair World Trade System, p. 251.

⁷¹ Further on this issue see below Sect. 4.

⁷² Panel Report, Canada – Patent Protection of Pharmaceutical Products, WT/DS114/R, adopted 7 April 2000, DSR 2000:V, p. 2289, and Panel Report, United States – Section 110(5) of the US Copyright Act, WT/DS160/R, adopted 27 July 2000, DSR 2000:VIII, p. 3769.

are unduly limited: if the axiom is accepted that "one size does not fit all", this must not only apply to the minimum rights imposed, but also to exceptions and limitations chiselling out their exact scope. In order to arrive at sensible results in the search for meaningful rules, internationally valid limits on the protection available must therefore be infused with a sound portion of flexibility and room for policy choices. It would arguably be counterproductive if ceilings were drafted in an overly ambitious fashion, striving to capture the optimal model of balancing protection and public domain interests. If at all, this would only be feasible on the basis of a global consensus on the public interests serving as ceilings and the way in which they should be balanced against countervailing protection objectives. Given the economic, technological, cultural, social and religious diversity still persisting around the globe in our times, this is no realistic scenario. Overambitious ceilings could even seriously harm the objectives they are supposed to serve, by imposing one particular value system over various equally valid alternatives.

On the other hand, if the ambition is set at a very low level, this would mean that mandatory ceilings are only imposed where limitations are internationally accepted anyhow, and hence, little is added to improve the present situation. Another risk combined with a markedly "modest" approach is that if only the most essential limitations are set out as mandatory in international instruments, some countries might be motivated, either of their own volition—in order to be on the "safe side"—or under pressure from trading partners, to implement exactly that catalogue in their laws, thereby renouncing other legislative options that would (legitimately) provide for better access or more freedom. In order to steer clear of such risks, ceiling treaties must be carefully drafted so as to leave sufficient "wiggle room" for legislatures, emphasizing that the ceiling is only meant to cap the extent of protection, while countries remain flexible, within certain limits, to promulgate more far-reaching limitations and exceptions.

3.4.2 Examples

The Marrakesh Treaty offers an interesting example of drafting techniques intended to preserve the goal of flexibility. The core provision in Article 4(1) is drafted in a fairly broad manner:

Contracting Parties *shall* provide in their national copyright laws for a limitation or exception to the right of reproduction, the right of distribution, and the right of making available to the public as provided by the [WCT] to facilitate the availability of works in accessible format copies for beneficiary persons.⁷³

Paragraph 1 also specifies that contracting parties *should* permit changes needed to make the work accessible in the alternative format.

⁷³ Emphasis added.

In the second paragraph, Article 4 sets out, in a rather detailed fashion, a manner in which countries *may* fulfil their obligations under Article 4(1), namely by permitting that the acts necessary to provide access for the beneficiaries of the treaty to accessible format copies are performed by an "authorized entity", which is defined in Article 2 of the treaty as "an entity that is authorized or recognized by the government to provide education [and similar activities] to beneficiary persons on a non-profit basis." The treaty thereby combines binding obligations with an approach that rather reminds of soft law, such as promulgating best practices or a model law. As far as can be seen, that binary approach has no precedent in international law; it will be interesting to observe its impact on practice.

If Contracting Parties choose to adopt different modes of implementation, Article 4(3) confirms that they are free to do so, under the condition that the limitations and exceptions by which the obligation under Article 4(1) is fulfilled comply inter alia with Article 11, which refers to the three-step test in all of its relevant versions (Article 9(2) Berne Convention, Article 13 TRIPS, and Article 10 (1) and 10(2) WCT). Of course, Article 4(2) as well operates under the condition that it is TRIPS compatible; however, different from Article 4(3), no express reference is made therein to Article 11. Neutral as it is in its actual legal effect, this regulatory detail seems to signal that TRIPS compliance is basically taken for granted, so that contracting parties espousing the model set out in Article 4(2) can feel safe about their international obligations. Furthermore, the "4(2) model" has clear practical advantages over alternative schemes that countries may adopt under Article 4(3). This concerns in particular cross-border exchange or importation of accessible format copies, as stipulated in Articles 5 and 6 Marrakesh Treaty: without an authorized entity being charged with the control and exercise of those options, it will be more difficult to make use of them in a manner that is both efficient and provides the necessary legal certainty.

It can be submitted therefore that although the Marrakesh Treaty does not impose a one-sized solution on contracting parties, the room left for institutional choices is rather small in practice. Experience will show whether that leads to smooth solutions or to a new form of bureaucracy⁷⁴ that might prove to be a burden not least for developing countries.

Apart from the institutional structure, however, the Marrakesh Treaty does leave meaningful space for national policy choice in a number of regulatory details.⁷⁵ For instance, where contracting parties choose to subsidize the making of accessible format copies and thus provide for sufficient market supply on reasonable terms, or

⁷⁴ It seems that in many countries the associations of blind and visually impaired persons (where they exist) are ready to assume the task so that no new infrastructure is needed. However, it then needs to be decided whether the activities of such organizations need to be supervised to some extent, and by whom, etc.

⁷⁵ It is true that to grant "wiggle room" also enhances the probability of divergences of national law, which might become a problem in particular in the context of cross-border exchange; see below.

if the market is functioning anyhow, ⁷⁶ the limitations and exceptions under Article 4(1) may not need to become operational (Article 4(4)). Also, it is left to contracting parties to determine whether the limitations and exceptions shall apply without financial compensation, or shall be subject to statutory remuneration, or be implemented through other regulatory schemes, such as compulsory licensing.

On a more general level, Article 10(1) Marrakesh Treaty sets forth that "[n] othing shall prevent Contracting Parties from determining the appropriate method of implementing the provisions of this Treaty within their own legal system and practice." Furthermore it is recognized in Article 12 that contracting parties may create more far-reaching limitations and exceptions than those set forth in the treaty, in accordance with their economic situation and their social and cultural needs, as long as that is in conformity with the respective contracting party's international rights and obligations.

The proposed IFLA Treaty as well makes clear that contracting parties' freedom to enact more extensive limitations and exceptions is not to be encumbered⁷⁸ and that implementation must occur in accordance with contracting parties' own legal systems.⁷⁹ Regarding the leeway for implementation that is left in the individual provisions, however, the proposed regulation is more restrictive than the Marrakesh Treaty. In particular, a right to deploy remuneration schemes is only granted in the form of a "grandfather clause", i.e. only where such schemes are in operation at the time of accession.⁸⁰ In other regards as well, the proposal goes rather far in prescribing "optimal" solutions as seen from the perspective of the beneficiaries. Thus, the proposal sets forth that as a matter of principle, denying licenses on reasonable terms to libraries or archives may amount to unjust discrimination,⁸¹ and that reproduction for preservation or other privileged purposes, use for the benefit of disabled persons, access to retracted and withdrawn works, use of orphan works,

⁷⁶ This might be the case e.g. for audio books that have a rather broad audience anyhow and are therefore likely to be available under normal market conditions.

⁷⁷ Furthermore, Article 10(2) provides that "Contracting Parties may fulfill their rights and obligations under this Treaty through limitations or exceptions specifically for the benefit of beneficiary persons, other limitations or exceptions, or a combination thereof, within their national legal system and practice. These may include judicial, administrative or regulatory determinations for the benefit of beneficiary persons as to fair practices, dealings or uses to meet their needs consistent with the Contracting Parties' rights and obligations under the Berne Convention, other international treaties, and Article 11" [i.e. the reference enshrined in that article to the three-step test].

⁷⁸ Article 21 IFLA-P.

⁷⁹ Article 22(1) IFLA-P; in addition, it is stipulated that the application of the treaty must be transparent, "taking into account the priorities and special needs of developing countries as well as the different levels of development of the Contracting Parties" (Article 22(2)) and that "Contracting Parties shall ensure that implementation of this Treaty allows for the timely and effective exercise of the limitations and exceptions it mandates, including expeditious procedures that are fair and equitable" (Article 22(3) IFLA-P).

⁸⁰ Article 4(2) IFLA-P.

⁸¹ Article 6 IFLA-P – this is called the "Right to Acquire Works".

cross-border use and translation shall all be permitted, if they are in accordance with "fair practices" or undertaken for certain privileged purposes. ⁸² In its current form, the proposal represents a fairly ambitious "wish list" that, if accepted, would strongly propel international harmonisation of copyright aspects that are of relevance for libraries and archives. ⁸³

Compared to the IFLA-P, the draft IICLE avoids any overregulation. Instead, the text captures the essence of rules and principles that are considered as indispensable for a well-functioning copyright system. Accordingly, it leaves much to regulate for national legislatures. Regarding remuneration, a distinction is made between certain types of limitations and exceptions that are of such a fundamental nature that access to protected subject matter should be granted for free, and others where it is for the national lawmaker to decide whether and how remuneration should be granted. In order to ensure that the essential freedoms included in the draft are not misunderstood so as to advise against more far-reaching regulations, each provision sets out expressly that contracting parties are obliged to introduce the respective limitations and exceptions, without being limited to the stipulations contained therein. Furthermore, as in the other texts quoted above, deference is made to the national legal systems in regards of the modalities of implementation.

4 Compatibility with Previous International Conventions

4.1 "Conflict Rules"

As ceiling rules are enshrined in separate treaties and do not undertake to reform the current international treaty system in its entirety, WTO members must appraise the risk that by adhering to ceiling treaties and complying with the obligations set out therein they might be found in violation of TRIPS, including the provisions of the Paris and Berne Conventions to which they are bound under TRIPS Articles 2 and 9 (2). A major number of countries further need to respect the WIPO Internet Treaties (WCT and WPPT), with the notable distinction vis-à-vis TRIPS that violations of those treaties do not result in WTO dispute settlement proceedings. ⁸⁴

Recognizing the importance of the issue, compatibility with current obligations is regularly addressed in post-TRIPS IP treaties. Article 1 Marrakesh Treaty

⁸² Articles 7-14 IFLA-P.

⁸³ Even though the proposal is certainly backed by sound considerations, it must be submitted that the current document, rather than representing a text that could realistically be adopted as an international instrument, appears to have been drawn up as an "entry bid" to international negotiations that must ultimately result in compromise.

⁸⁴ However, where adherence to the WIPO Internet Treaties forms part of obligations incurred under bilateral agreements, this may eventually result in international arbitration proceedings, depending on the stipulations in the agreement.

therefore stipulates that "[n]othing in this Treaty shall derogate from any obligations Contracting Parties have to each other under any other treaties, nor shall it prejudice any rights that a Contracting Party has under any other treaties". By incorporating such a "conflicts rule" into a new instrument contracting parties basically agree that in case of conflict, the obligations incurred under TRIPS will ultimately prevail. While that reduces the risk for member states of head-on collisions between duties ensuing from two different treaty systems that may turn out to be incompatible, such clauses could draw the criticism that they diminish the value and independent character of the new treaty.

With a more robust approach, Article 2 IFLA-P sets forth that "[n]othing in this treaty *is understood to derogate* from the obligations of Contracting Parties" under the Berne Convention, TRIPS, the WIPO Internet Treaties, and the Marrakesh Treaty. This seems to indicate that the draftsmen, while being aware of the possibility of conflicts arising between those treaties and the IFLA-P, came to the conclusion that misgivings in that regard are unfounded; therefore, they announce to proceed on the premise that the obligations under the treaty are in conformity with TRIPS and other international treaties, without the prior treaties being given automatic prevalence over the new instrument. Should conflicts nevertheless arise, states adhering to both treaty systems would therefore have to face the choice between violating one or the other obligation incurred under international law; other than in case of the conflicts clause set out in the Marrakesh Treaty, no "safe route" out of this dilemma is indicated. 87

The risk of being found in violation of existing treaty obligations increases with the size and specificity of limitations and exceptions prescribed in a ceiling treaty. ⁸⁸ On the contrary, where the treaty leaves sufficient wiggle room, member states usually have a good chance to arrive at solutions encompassing the various obligations incurred without getting into serious, dissoluble conflicts. ⁸⁹ Of course, the final assessment depends on the manner in which the freedom for legislatures to

⁸⁵ See also J. Blomqvist (2011), The Consistency of Mandatory Exceptions Treaties with International Conventions in the Field of Copyright and Related Rights (paper presented at the 2011 ALAI Congress in Dublin). This result might already follow per se if an agreement in the area of copyright (or related rights) is qualified as a "special agreement" in the meaning of Articles 20 (resp. 22) of the Berne (and Rome) Convention(s). Otherwise, applying the rule of lex posterior the later treaty might prevail, which would lead, in case of genuine conflict, to a violation of obligations resulting from the earlier treaty.

⁸⁶ Emphasis added.

⁸⁷ As ceiling treaties such as the IFLA-P do not contain particular sanctioning mechanisms, the choice – where it needs to be made – would most probably be in favour of TRIPS.

⁸⁸ The same principle governs conflicts between treaty obligations in general. As most treaties outside the area of intellectual property are of a programmatic or framework character rather than imposing specific duties this frequently means that in case of a potential conflict the "hard and fast" rules enshrined in IP treaties will prevail over the softer, more flexible character of others.

⁸⁹ For a thorough elaboration of the matter see J. Pauwelyn (2003), Conflict of Laws in International Public Law – How WTO Law Relates to other Rules of International Law, pp. 158 et seq.

make their own policy choices is appraised by WTO panels or other bodies or institutions acting as arbiters when national legislation is challenged. Submitting that the decision is not clear-cut but depends on the interpretation of open clauses and value-based judgments, the fact that a state allegedly violating TRIPS (or other international agreements) adheres to a ceiling treaty and has acted with the aim of fulfilling its obligations deriving therefrom would appear to weigh rather in favour of the respondent than to compromise it. The positive influence of such specific treaty commitments on the assessment of compliance with TRIPS is, naturally, particularly strong where the treaty is based on sound and commonly appreciated objectives. Furthermore, in close cases the positive or negative outcome also depends on the importance attributed by the deciding body to the general principle that treaty obligations must not be interpreted in an isolated fashion, but that they need to be viewed as forming part of a broader international context. 90 It remains true, however, that even under a generous interpretation, ceiling treaties do not offer a viable exit strategy for countries resenting their current commitments. The "red lines" demarcating the core contents of TRIPS and other international IP agreements cannot simply be set aside without incurring legal consequences.

4.2 Article 20 Berne Convention

Ceiling treaties in copyright are confronted with a particular issue deriving from Article 20 Berne Convention. In an effort to safeguard the positive accomplishments in favour of authors that are enshrined therein against any future downgrading, the provision reserves the right for Berne members to enter into subsequent special agreements among themselves to treaties granting authors more extensive rights than those in the Berne Convention, or else containing other provisions that are not contrary to the Convention. This may trigger the question whether concluding ceiling treaties is, as such, a viable option for Berne members: it is obvious that such treaties do not grant "more extensive" rights, but rather have a contrary effect. On the other hand, even dedicated advocates of strong copyright protection under the Berne Convention do not seem to endorse the position that for structural reasons ceiling treaties are incompatible per se with the mandate to

⁹⁰ Regarding the integration of different objectives for the interpretation of treaty provisions in the WTO system see in particular Appellate Body Report, United States – Import Prohibition of Certain Shrimp and Shrimp Products, WT/DS58/AB/R, adopted 6 November 1998, DSR 1998: VII, p. 2755, para. 152; H. Grosse Ruse-Khan (2011), Assessing the Need for a General Public Interest Exception in TRIPS, in A. Kur & M. Levin (Eds.), Intellectual Property Rights in a Fair World Trade System, pp. 199 et seq.; H. Grosse Ruse-Khan (2013), A Conflict-of-Laws Approach to Competing Rationalities in International Law: The Case of Plain Packaging between IP, Trade, Investment and Health, Max Planck Institute for Intellectual Property & Competition Law Research Paper No. 13–05, pp. 13 et seq.

conclude special agreements within the framework of Article 20.⁹¹ Furthermore, even if the argument were correct that ceiling treaties are per se alien to the objectives Berne members are allowed to pursue by way of concluding special agreements, it would hardly have an effect in practice. In particular the argument would not affect the validity of national legislation enacted in compliance with the obligations enshrined in ceiling treaties.⁹² Of actual relevance is solely the question whether the actual legislation ensuing therefrom is compatible with international norms.

4.3 Potential Issues

Assessing the compatibility of ceiling treaties with TRIPS and other international conventions in detail is beyond the scope of this chapter. Also, insofar as mere drafts and proposals are concerned, such an evaluation would be premature. Regarding the Marrakesh Treaty as the only current example for an international agreement stipulating mandatory limitations and exceptions, it can be concluded in a gross fashion that the manner in which the conditions of production and distribution of accessible format copies are regulated—with or without entrusting an authorized entity with those tasks—is sufficiently clear-cut⁹³ and limited in its scope to meet the conditions of the three-step test.

One potentially critical issue—in the Marrakesh Treaty as well as in the IFLA-P—is presented by the regulations on cross-border exchange of copies produced under the limitations and exceptions enshrined in the treaties. Acts connected with such exchange pose an issue in both countries involved in the process. ⁹⁴ Firstly, limitations and exceptions that allow making copies under certain circumstances are regularly only meant to respond to the specific situation in the state passing the legislation, and should not be spread beyond that territory to countries where the factual and legal situation may be different. Secondly, unauthorized importation of

⁹¹ The argument is not even considered in the commentary on the Marrakesh treaty by M.J. Ficsor (2013), Commentary on the Marrakesh Treaty on Accessible Format Copies for the Visually Impaired, Copyright See-Saw of 11 October 2013; likewise J. Blomqvist (2011), The Consistency of Mandatory Exceptions Treaties with International Conventions in the Field of Copyright and Related Rights (paper presented at the 2011 ALAI Congress in Dublin).

⁹² Meaning that international obligations have no legal effect within the country unless there are transposed into national law. In contrast to that, in countries following a monistic approach international treaty obligations become directly valid after ratification (but are regularly also implemented through national legislation, in particular where the treaty norms are not clear and unconditional enough to be apt for direct interpretation). In both cases alike, the (in)validity of the international treaty has no direct impact on the validity of national provisions.

⁹³ This does of course not exclude difficulties in regards of the core definitions being applied differently in different countries, etc.; see on this point M. Trimble (2014), The Marrakesh Puzzle, 45 IIC 2014, 768.

⁹⁴ See above (this chapter), 2.c.

copies is problematic in particular in countries that do not apply the principle of international exhaustion. Furthermore, even where international exhaustion is accepted, importation remains illegal (or its legality remains questionable) if the relevant copies were produced in the source country under the operation of law, i.e. without authorization by the right holder, 95 or if copies are made available in digital form. 96

The Marrakesh Treaty is carefully crafted so as to avoid legal gaps and pitfalls in the context of cross-border exchange resulting from those issues. ⁹⁷ Article 5 allows the making available abroad of copies produced under limitations and exceptions. The exchange shall preferably take place between authorized entities, but copies can also be delivered directly to beneficiary persons. Either way, care must be taken to ensure that the distribution of such copies does not (or at least not knowingly) exceed the ambit of privileged use in regards of persons or purposes. Furthermore, in the rare cases where parties are not bound by Article 9 Berne Convention and are therefore free to reproduce material thus acquired, the national authorities must ensure that such reproductions remain within their own territory. On the receiving end of cross-border exchange, Article 6 stipulates that national law shall allow unauthorized importation of accessible format copies only in case that the making of such copies would be permitted under national law. ⁹⁸ All in all, the legal

⁹⁵ At least according to the notion of exhaustion applying in EU law, consent of the right holder to first marketing is crucial for the applicability of the concept, meaning that the initial authorization cannot be replaced by the operation of legal rules such as limitations and exceptions or compulsory licenses; see ECJ, Pharmon/Hoechst AG, 19/84, EU:C:1985:304. It is unclear whether the same concept also underlies Article 6 TRIPS, with the result that countries allowing import of protected subject matter manufactured in the source country under the operation of law would be in violation of the provisions determining the minimum scope of rights conferred, unless the option to import is limited to certain special cases meeting the (other) requirements of the three-step test. M. Trimble (2014), The Marrakesh Puzzle, 45 IIC 2014, 768, seems to submit that extending the principle of international exhaustion to all legally manufactured copies, irrespective of the owner's consent, is possible in principle; however, she also postulates that the right to import must remain limited to privileged purposes.

⁹⁶ The CJEU has confirmed that digital copies of software are subject to the principle of (regional) exhaustion in ECJ, UsedSoft v. Oracle, C-128/11, EU:C:2012:407. However, this solution may not be espoused in other countries, and even in the EU it is uncertain to what extent it applies to digital products in general.

 $^{^{97}}$ For the complex questions arising in the context see M. Trimble (2014), The Marrakesh Puzzle, 45 IIC 2014, 768.

⁹⁸ Ibid., suggesting that member states may choose in that regard between a number of options: applying their own law, that of the source country, or both; or a variation of those options may apply. However, the wording of the provision rather suggests that the law of the importing country shall determinative in the sense that import is only permitted if the making and distribution of copies would be legal under the law of that country, ceteris paribus. On the other hand, the law of the source country – or rather: the question whether the making of the copies was legal in the source country – cannot be ignored either. A different interpretation that might open the floodgates to importation of copies that were made illegally (as assessed under the source country's law) would hardly be compatible with general international obligations, in particular the three-step test. It must therefore be excluded at least that copies are imported if in the source country there was no legal basis for their making.

construction appears to meet its goal, though its implementation in practice may not be easy, ⁹⁹ in particular where digital copies are concerned.

Article 13 of the IFLA-P is much shorter than that, simply stating that "[t]o the extent that it is necessary for the exercise of a limitation or exception provided for in this Treaty, cross-border uses shall be permitted." As explained in the comments, this is not considered as giving "carte blanche" to any kind of cross-border use, as each exception has a set of conditions that must be met also in case of cross border use. Thus, in case of Article 8(2) permitting to "reproduce and supply a copy of a copyright work, or of material protected by related rights, to a library or archive user, in any ... case where a limitation or exception in national legislation would allow the user to make such copy" the term "national legislation" must be read in cross-border cases as (also) referring to the law applying in the country where the user requesting the copy is situated.

5 Ensuring Effectiveness: Contracts and Technical Protection Measures

As a matter of principle, limitations and exceptions are rarely mandatory in the sense that they bind the parties within a private contractual relationship. Consequently, provisions in IP licenses may override such provisions, thereby defining their own area of (*inter-partes*) exclusivity. In the digital copyright context, the problem is exacerbated by the use of digital rights management and TPMs. Where full, unqualified legal protection against circumvention is afforded to such measures, the enjoyment of limitations is severely encumbered not only for practical but also for legal reasons. ¹⁰⁰ In order to ensure the efficient implementation of the policy goals pursued, ceiling treaties must therefore react to the challenge. Thus, Article 7 Marrakesh Treaty sets forth that contracting parties shall take "appropriate measures, as necessary" to ensure that legal rules prohibiting the circumvention of TPMs will not prevent beneficiary persons from enjoying the limitations and exceptions provided for in the treaty. The same wording was chosen in Article 16 IFLA-P. ¹⁰¹ In other words, although deployment of TPMs is not banned as such,

⁹⁹ Much will depend on the manner and spirit in which Contracting States cooperate to facilitate cross-border exchange, as envisaged in Article 9 Marrakesh treaty.

¹⁰⁰ As Graeme Dinwoodie has pointed out there is a pertinent risk that by using the same kind of technical bars on contents distributed internationally, firms actually impose uniform "standard contracts" worldwide, which might translate into a de facto creation of international norms. G.B. Dinwoodie (2007), The International Intellectual Property System: Treaties, Norms, National Courts, and Private Ordering, in D. Gervais (Ed.) Intellectual Property, Trade and Development – Strategies to Optimize Development in a TRIPS-Plus Era, p. 111.

¹⁰¹ In the current version of the IICLE, a slightly different wording has been chosen: "Contracting Parties shall ensure that the enjoyment of the permitted uses provided for in this Treaty is not unreasonably impeded by technological protection measures." If adopted in the final text, the

at least the legal obstacles resulting from the sanctioning of circumvention must be dismantled. Again it is left to the contracting parties to regulate the concrete manner in which the obligation is implemented. This may occur by simply indemnifying technical circumvention undertaken by beneficiary persons within the remit of the limitation, or, in a more efficient, proactive manner, by obliging the right holder, upon request or *ex ante*, to ensure access for purposes covered by the relevant legal privilege.

In addition to addressing TPMs, Article 15 IFLA-P stipulates that "[a]ny contractual provisions that prohibit or restrict the exercise or enjoyment of the limitations and exceptions in copyright adopted by Contracting Parties according to the provisions of this Treaty, shall be null and void." A provision to that effect shall also be set out in the draft IICLE. 102 Both treaty proposals thereby venture into an area that by now is largely unexplored on the level of international IP conventions. As a matter of principle, the provisions seek to institute, in an international context, the notion of unalienable users' rights. 103 Odd as the concept may appear when viewed through the lens of traditional IP and particularly copyright doctrines, it is a fact that the paradigm shift allegedly commenced by the Marrakesh Treaty as the forerunner of ceiling treaties will only be complete if the contractual level as well is taken into consideration.

In the Marrakesh Treaty, taking that step was ultimately considered as dispensable. ¹⁰⁴ It is true that, if and as long as the beneficiaries are institutions with sufficient negotiation power and full awareness of their rights, the risk is small that they will find themselves bound by contracts prohibiting use of certain treaty privileges, e.g. contracts banning the import of copies irrespective of the circumstances. However, the issue might become acute in countries or regions where the conditions are different, and the beneficiary persons or institutions are more easily subjected to contractual obligations curtailing the privileges obtained under the treaty. With the text of the Marrakesh Treaty lacking a provision addressing this situation, it remains a matter for the national law applying to the relationship between the parties to decide whether contractual stipulations derogating from the rights enshrined in the treaty are able to stand.

provision would send a somewhat stronger signal than Article 7 Marrakesh treaty in that it targets the deployment of TPMs as such, and not only the provisions on circumvention.

¹⁰² Cf. B IV of the working document (precedence of permitted uses over conflicting/deviating contracts).

¹⁰³ The term "users' rights" is fraught with considerable dogmatic ballast and should rather be avoided where that leads into fruitless dogmatic debate. However, from a general, "non-technical" point of view its use appears appropriate when it concerns the situation addressed in the text above, i.e. with regards to privileged use that cannot be overridden by contract.

¹⁰⁴ The original proposal launched by the WBU in October 2008 had contained in Article 7 a clause according to which "any contractual provisions contrary to the exception provided in article 4 shall be null and void".

6 How to Proceed from Here?

Submitting that the Marrakesh Treaty is not an ephemeral phenomenon, but rather signals that ceiling treaties are here to stay as an accepted form of international law-making in the field of IP, strategic options for launching further initiatives of that kind need to be evaluated with regard to their respective strengths and drawbacks.

Of key importance is, of course, that the concern addressed by the proposal has sufficient traction to muster the necessary political support. There are indeed good reasons why the novel paradigm of ceiling treaties first materialized in the form of the Marrakesh Treaty that emerged from combining a serious, morally unquestionable concern with skilful political lobbying. The IFLA-P follows a similar pattern; the importance of the issue, the integrity of beneficiary institutions and the role they play for the public welfare are not to be doubted, and also there, the requests are bundled and articulated by a well-organized international association. However, such treaty-making in the interest of one particular group of beneficiaries, as commendable as it may be in each individual case, inevitably raises the question whether the fragmentation ensuing from that approach may have detrimental effects in the long run. Such undesirable effects do not only concern the lack of transparency potentially resulting from the parallel existence of a number of treaties with related aims, but with slight differences in regards of wording and structure. It is also not without risk if only the well-organized interests are taken into account for specific treaty-making, whereas the more diffuse interests of the public at large remain unheeded. Furthermore, if the development should point in the direction of a proliferation of individual ceiling treaties each serving a particular group interest, the repeated efforts connected therewith might easily lead to fatigue and frustration among the negotiators and the public.

A more comprehensive approach towards mandatory limitations and exceptions in copyright is followed in the draft IICLE, thus avoiding the risk of fragmentation and clientele-oriented policy-making. Under a general, public-welfare oriented point of view, such a strategy appears preferable to a step-by-step procedure resulting in a possibly ill-calibrated patchwork texture. It is true, however, that such concerted efforts enhance the complexity of reasoning, and that they lack the specific drive resulting from the pointed force of arguments underpinning one highly specific cause.

Finally, it is important to determine the institutional platform on which ceiling treaties are considered and possibly concluded. An obvious choice is offered by WIPO and its Standing Committees, in the framework of which the Marrakesh Treaty was concluded. The IFLA-P as well has been launched in that context. As an initial hurdle in this respect, an issue needs to be accepted for discussion by the WIPO Assembly; however, with limitations and exceptions figuring on the agenda anyhow, that might not present the biggest problem.

Alternatively, negotiation of ceiling treaties might be commenced in an, at least initially, limited caucus of specially invited countries taking a particular interest in

the topic. This is the way forward espoused by the IICLE. 105 As is well remembered, such a "country club approach" was chosen for the (unsuccessful) attempt to conclude the Anti-Counterfeiting Trade Agreement (ACTA). Adapting the same strategy for a treaty meant to reign in the pervasive dynamics of IP protection might therefore seem ironic, but it could work. Forming such a "coalition of the willing" would have the advantage of reducing the risk that the gist of the draft is grated beyond recognition in the process of bargaining for political compromises that negotiating in a large forum such as WIPO inevitably harbours. On the other hand, the political impact of treaties concluded within WIPO is typically superior to that of separately negotiated agreements. To some extent, of course, the actual effect of "country club" treaties depends on the leveraging power of contracting states and their interest to "export", through bilateral agreements, substantive treaty obligations to non-participating countries. In that regard, the position of countries potentially favouring the conclusion of an agreement like the draft IICLE inter se is certainly different from the network of (mainly) industrialized countries promoting ACTA. Nevertheless, broader political success might be achievable if the substance of the treaty and its operative results are convincing, thereby triggering similar political demands and initiatives from the copyright communities within countries currently taking a rather detached stance.

7 Concluding Remarks

It is still uncertain at this time whether ceiling treaties will actually become a distinguishing feature of international IP norm-setting in the post-TRIPS era. A first, important step has been undertaken in that direction by the conclusion of the Marrakesh Treaty, and more proposals are pending. However, the difficulties of operationalizing the approach within the existing structures of international IP law should not be underestimated. Apart from the problem of organising sufficient political support for conclusion and ratification of such treaties, there is an apparent lack of an institutional framework or factual levers ensuring due implementation of the obligations incurred. Furthermore, it remains doubtful to what extent ceiling treaties can actually form an efficient remedy against countries obliging themselves to observe TRIPS-plus levels of protection in the framework of bilateral agreements, and whether it is possible to avoid negative effects resulting from the inevitable risk that ceiling treaties resemble minimum rights conventions in that they reduce national autonomy and policy space on the domestic level. Finally, if it should become a general trend that obligations to provide enhanced protection typically imposed through bilateral agreements—are countered by a growing

¹⁰⁵ The same concept seems to underlie the proposed "Treaty on Access to Knowledge" (supra, fn. 46). The draft text foresees that the participating countries organize the administration, including the institutional framework, among themselves.

number of ceiling treaties, the issue of conflicting international obligations might gain momentum, especially where such conflicts cannot be solved by integrative interpretation. The topic calls for more attention and research than what has been undertaken until now.

Lastly, considering the overall theme of this volume, it may be asked whether ceiling treaties would represent the ultimate step taking international IP protection "beyond trade rules". Other than what might be expected, the answer is no clear-cut "yes". As was pointed out with regard to the Marrakesh Treaty, allowing unimpeded supply of foreign markets can be a powerful motive for concluding such agreements. Also in a more general sense, it appears basically logical from the perspective of international trade to discuss the "upper limit" of the protection granted, submitting that overprotection of IP can be as detrimental for free trade as the opposite. ¹⁰⁶ From that perspective, the paradigm shift represented by the notion of ceilings in general ¹⁰⁷ and the Marrakesh treaty in particular ¹⁰⁸ may not be such a big step after all: similar to minimum rules, prescribing a limit that national legislatures may not exceed enhances the level of security and foreseeability in which economic actors take a vital interest when they trade across borders.

References

Blomqvist, J. (2011), The Consistency of Mandatory Exceptions Treaties with International Conventions in the Field of Copyright and Related Rights (paper presented at the 2011 ALAI Congress in Dublin), available at: http://www.alaidublin2011.org/wpcontent/ (accessed 20 May 2015)

Dinwoodie, G.B. (2006), The International Intellectual Property Law System: New Actors, New Institutions, New Sources, 10 Marquette Intell. Prop. L. Rev. 2006, 214, Milwaukee: Marquette University Law School

Dinwoodie, G.B. (2007), The International Intellectual Property System: Treaties, Norms, National Courts, and Private Ordering, in D. Gervais (Ed.) Intellectual Property, Trade and Development – Strategies to Optimize Development in a TRIPS-Plus Era, 111, Oxford: Oxford University Press

Dreyfuss, R. & Dinwoodie, G.B. (2012), A Neofederalist Vision of TRIPS, Cheltenham: Edward Elgar

Dreyfuss, R. (2004), TRIPS – Round II: Should Users Strike Back, 71 U. Chi. L. Rev. 2004, 27, Chicago: University of Chicago Press

Ficsor, M.J. (2013), Commentary on the Marrakesh Treaty on Accessible Format Copies for the Visually Impaired, Copyright See-Saw of 11 October 2013, available at http://www.copyrightseesaw.net/archive/?sw_10_item=50 (accessed 20 May 2015)

¹⁰⁶ On that point see contribution by Ruse-Khan, H.G. (2015), IP and Trade in a Post-TRIPS Environment, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, Heidelberg: Springer (this volume).

¹⁰⁷ Ruse-Khan, H.G. (2015), IP and Trade in a Post-TRIPS Environment, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, Heidelberg: Springer (this volume).

¹⁰⁸ P.D. Harpur & N.P. Suzor (2013), Copyright Protections and Disability Rights: Turning the Page to a New International Paradigm, 36 UNSW L.J. 2013, 745.

- Franck, S.D. (2005), The Legitimacy Crisis in Investment Treaty Arbitration: Privatizing Public International Law Through Inconsistent Decisions, 73 Fordham L. Rev. 2005, 1521, New York: Fordham University, School of Law
- Franz, V. (2013), The Miracle in Marrakesh: Copyright Reform to end the "Book Famine", Open Society Foundation, available at: http://www.opensocietyfoundations.org/voices/miracle-mar rakesh-copyright-reform-end-book-famine (accessed 20 May 2015)
- Geiger, Ch. (2006), 'Constitutionalizing' Intellectual Property Law? The Influence of Fundamental Rights on IP in the European Union, 37 IIC 2006, 371, München: C.H. Beck
- Gervais, D. (2012), The TRIPS Agreement Drafting History and Analysis, 4th ed., London: Sweet & Maxwell
- Ginsburg, J. & Kernochan, J.M. (2004), One Hundred and Two Years Later: The US joins the Berne Convention, in R. Merges & J. Ginsburg (Eds.), Foundations of Intellectual Property, 298, New York: Foundation Press Thomson West
- Ginsburg, J. & Ricketson, S. (2006), International Copyright and Neighbouring Rights, 2nd ed., Oxford: Oxford University Press
- Grosse Ruse-Khan, H. & Jaeger, Th. (2009), Policing Patents Worldwide EC Border Measures against Transiting Generic Drugs under EC and WTO Intellectual Property Regimes, 40 IIC 2009, 502, München: Beck
- Grosse Ruse-Khan, H. (2009), Time for a Paradigm Shift? Exploring Maximum Standards in International Intellectual Property Protection, 1 Trade, L. and Dev. 2009, 66, Jodhpur: National Law University
- Grosse Ruse-Khan, H. (2011), Assessing the Need for a General Public Interest Exception in TRIPS, in A. Kur & M. Levin (Eds.), Intellectual Property Rights in a Fair World Trade System, 199, Cheltenham: Edward Elgar
- Grosse Ruse-Khan, H. (2013), A Conflict-of-Laws Approach to Competing Rationalities in International Law: The Case of Plain Packaging between IP, Trade, Investment and Health, Max Planck Institute for Intellectual Property & Competition Law Research Paper No. 13–05, 13, available at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2204980 (accessed 20 May 2015)
- Grosse Ruse-Khan, H. et al. (2013), Principles for IP Provisions in Bilateral and Regional Agreements, 44 IIC 2013, 878, Heidelberg: Springer
- Harpur, P.D. & Suzor, N.P. (2013), Copyright Protections and Disability Rights: Turning the Page to a New International Paradigm, 36 UNSW L. J. 2013, 745, Sydney: University of New South Wales
- Helfer, L. (2004), Regime Shifting: The TRIPS Agreement and New Dynamics of International Intellectual Property Lawmaking, 29 Yale J. Int'l L. 2004, 2, New Haven: Yale Law School
- ICTSD/UNCTAD (2005), Resource Book on TRIPS and Development, Cambridge: Cambridge University Press
- Khan, B.Z. & Sokoloff, K.L. (2009), Historical Perspectives on Patent Systems in Economic Development, in N. Weinstock Netanel (Ed.), The Development Agenda, p. 232, Oxford: Oxford University Press
- Kur, A. & Grosse Ruse-Khan, H. (2011), Enough is Enough The Notion of Binding Ceilings in International Intellectual Property Protection, in A. Kur & M. Levin (Eds.), Intellectual Property in a Fair World Trade System, p. 378, Cheltenham: Edward Elgar
- Kur, A. & Levin, M. (2014), The IPT Project Proposals to Reform the TRIPS Agreement, in G. Ghidini, R.J.R. Peritz & M. Ricolfi (Eds.), TRIPS and Developing Countries – Towards a new World Order?, p. 167, Cheltenham: Edward Elgar
- Kur, A. & Levin, M. (2011), IP in a Fair World Trade System, Cheltenham: Edward Elgar
- Kur, A. (2011), Limitations and Exceptions under the Three-Step Test, in A. Kur & M. Levin (Eds.), Intellectual Property Rights in a Fair World Trade System, p. 251, Cheltenham: Edward Elgar
- Lerner, J. (1999), 150 Years of Patent Protection, NBER Working Paper Series Vol. 7478 of August 1999, p. 15, available at: http://ssrn.com/abstract=179188 (accessed 20 May 2015)

- Maskus, K. (2000), Intellectual Property Rights in the Global Economy, Washington, D.C.: Institute for International Economics
- Max Planck Institute (2013), Copyright, Competition and Development (Report mandated by WIPO), available at: http://www.wipo.int/export/sites/www/ip-competition/en/studies/copyright_competition_development.pdf (accessed 20 May 2015)
- Pauwelyn, J. (2003), Conflict of Laws in International Public Law How WTO Law Relates to other Rules of International Law, p. 158, Cambridge: Cambridge University Press
- Ruse-Khan, H.G. (2015), IP and Trade in a Post-TRIPS Environment, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, Heidelberg: Springer (this volume)
- Saez, C. (2013), Over 50 Countries Sign Marrakesh Treaty On Copyright Exceptions And Limitations For The Blind, Intellectual Property Watch of 1 July 2013, available at: http:// www.ip-watch.org/2013/07/01/over-50-countries-sign-marrakesh-treaty-on-copyright-excep tions-and-limitations-for-the-blind/ (accessed 20 May 2015)
- Scheinwald, A. (2012), Who Could Possibly Be Against a Treaty for the Blind, 22 Fordham Intell. Prop. Media & Ent. L.J. 2012, 445. New York: Fordham University, School of Law
- Schiff, E. (1971), Industrialization without National Patents The Netherlands, 1869–1912, Switzerland, 1850–1907, Princeton: Princeton University Press
- Sherwood, M. (1993), Why a Uniform Intellectual Property System Makes Sense for the World, in M.B. Wallerstein, M.E. Mogee & R.A. Schoen (Eds.), Global Dimensions of Intellectual Property Rights in Science and Technology, p. 75, Washington, D.C.: National Academy Press
- Straus, J. & Klunker, N. (2007), Harmonisierung des internationalen Patentrechts, GRUR Int. 2007, 97, München: Beck
- Torremans, P. (2008), Intellectual Property and Human Rights (Enhanced Edition of Copyright and Human Rights), Alphen aan den Rijn: Wolters Kluwer
- Trimble, M. (2014), The Marrakesh Puzzle, 45 IIC 2014, 768, München: Beck
- Yu, P.K. (2007), Reconceptualizing Intellectual Property Interests in a Human Rights Framework, 40 UC Davis L. Rev. 2007, 1039, Davis: UC Davis School of Law

IP and Trade in a Post-TRIPS Environment

Henning Grosse Ruse-Khan

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Abstract In the 1980s, significant differences in the levels of IP protection around the globe triggered unilateral responses of the US as the key *demandeur* for stronger IP rights. Aspects of this unilateralism in turn served as a trade barrier for the importation of goods from other countries into the US. Some of these US measures were successfully challenged as a breach of international trade rules under GATT. The WTO TRIPS Agreement then created common standards for IP protection and enforcement, including some binding rules on IP as a barrier to trade that were motivated by the pre-TRIPS experiences. Against this background, this contribution questions whether the rules in TRIPS and GATT are still adequate to deal with today's reality of IP protection and enforcement in and beyond the trade context. This reality is increasingly framed by unilateral, bilateral and regional standards of IP rule-making that go beyond the multilateral norms found in TRIPS and create an increasingly fragmented system of "TRIPS-plus" protection and enforcement of IP rights around the globe.

Dr. Henning Grosse Ruse-Khan is Lecturer at the University of Cambridge, Fellow at King's College and External Research Fellow at the Max Planck Institute for Innovation and Competition, Munich.

H. Grosse Ruse-Khan (⊠)

Faculty of Law, University of Cambridge, Cambridge, UK

e-mail: hmg35@cam.ac.uk

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My core argument is that the uncoordinated expansion of TRIPS-plus rules increasingly serves as a barrier to global trade. This in turn begs the question whether the WTO rules on IP (TRIPS) and those on trade in goods (GATT) are—in the words of the overall conceptual framing of this project—"still fit to operate in such a changed environment" and can provide for adequate safeguards against trade barriers. My proposed answer is that for TRIPS and GATT to fulfil this function, they have to be applied in a way which facilitates harmonized, global maximum standards or ceilings for IP protection and enforcement as a necessary counterpart to the familiar minimum standards. These ceilings do exist in GATT and TRIPS, but have been under-used in the first 20 years of the WTO. I suggest that there are indications and good reasons for relying on them more extensively in an effort to mitigate the trade barriers resulting from uncoordinated expansion of TRIPS-plus rules in the last 15 or so years. In addition, in an ideal world, we would be aiming to introduce multilaterally agreed, more specific ceilings ensuring that reasonable limits to IP rights are available on a global scale.

1 Trade and IP: A Complex Relationship

The relation between international trade and intellectual property (IP) is multifaceted and ambiguous. When the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) came into being 20 years ago, WTO members aimed "to reduce distortions and impediments to international trade"—primarily by introducing "effective and adequate protection of intellectual property rights". In the same first paragraph of the TRIPS Preamble, WTO members express their desire "to ensure that measures and procedures to enforce intellectual property rights do not themselves become barriers to legitimate trade".

These quotes from the preamble point to disparate perspectives on the trade and IP relationship that serve as the contextual setting for this chapter: On the one hand, the effective protection and enforcement of IP rights in other countries is perceived as an essential element for global trade in IP-protected goods and services. TRIPS contains non-discrimination principles and minimum standards to achieve this. On the other hand, territorial IP rights and their enforcement create artificial barriers to the international trade in goods potentially subject to IP rights. The 1947 General Agreement on Tariffs and Trade (GATT) already took such a view and subjected trade restrictions resulting from domestic IP rights to a necessity test. Similarly, TRIPS *allows* WTO members to act against "practices which unreasonably restrain

¹ TRIPS Preamble, para. 1.

² See Article XX(d) GATT. The chapeau of Article XX GATT further prohibits an application of IP protection and enforcement measures, which constitutes a "disguised restriction on international trade".

trade"³—and even *obliges* them to ensure that IP enforcement procedures are not applied in a way as to "create barriers to legitimate trade".⁴

Two principal perspectives emerge: For the international IP system, the effective protection and enforcement of IP rights is a key element "to reduce distortions and impediments to international trade" caused by insufficient protection in markets abroad. For international trade law, territorial IP rights can function as barriers to trade—but measures enforcing them are tolerated if they are "necessary to secure compliance with laws or regulations which are not inconsistent with [GATT], including those relating to (...) the protection of patents, trade marks and copyrights". While the starting points taken appear different (if not contrary), each system includes tools to accommodate the other. The WTO system as a framework for IP and trade goes quite a way to ensure that each set of rules accepts and integrates the other's rationale.

Against this background, this contribution questions whether the rules in TRIPS and GATT are still adequate to deal with today's reality of IP protection and enforcement in and beyond the trade context. This reality is increasingly framed by unilateral, bilateral and regional standards of IP rule-making that go beyond the multilateral norms found in TRIPS and create an increasingly fragmented system of "TRIPS-plus" protection and enforcement of IP rights around the globe. My core argument is that the uncoordinated expansion of TRIPS-plus rules increasingly serves as a barrier to global trade. This in turn begs the question whether the WTO rules on IP (TRIPS) and those on trade in goods (GATT) are—in the words of the overall conceptual framing of this project—"still fit to operate in such a changed environment" and can provide for adequate safeguards against trade barriers. My proposed answer is that for TRIPS and GATT to fulfil this function, they have to be applied in a way which facilitates harmonized, global maximum standards or ceilings for IP protection and enforcement as a necessary counterpart to the familiar minimum standards. These ceilings do exist in GATT and TRIPS, but have been under-used in the first 20 years of the WTO. I suggest that there are indications and good reasons for relying on them more extensively in an effort to mitigate the trade barriers resulting from uncoordinated expansion of TRIPS-plus rules in the last 15 or so years. In addition, in an ideal world, we would be aiming to introduce more specific ceilings through multilateral agreement ensuring that reasonable limits to IP rights are available on a global scale.

Section 2 begins by explaining how unilateral expansion of IP protection has created trade barriers that were challenged under GATT prior to the enactment of TRIPS. It uses the GATT dispute over specific remedies available only against allegedly patent infringing imports into the US as an example which is still very

³ Article 8(2) TRIPS – which however is subject to a TRIPS consistency test.

⁴ Article 41(1) TRIPS.

⁵ Article XX(d) GATT.

⁶ See H. Grosse Ruse-Khan et al. (2013), Principles for Intellectual Property Provisions in Bilateral and Regional Agreements, 44 IIC 2013, 878.

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relevant today. Section 3 then discusses the role of TRIPS in setting common standards for IP protection and enforcement, including some binding rules on IP as a barrier to trade that were motivated by the pre-TRIPS experiences. In today's post-TRIPS environment, however, we are again faced with a fragmented international system where TRIPS-plus protection and enforcement has the potential to inhibit global trade. Section 4 looks at the example of additional protection for geographical indications via EU FTAs that prevents US agricultural products from relying on so far common names such as "Feta" or "Gorgonzola" to describe their goods. Similar to the pre-TRIPS scenarios, WTO trade law can offer remedies against TRIPS-plus IP protection that creates barriers to trade. The question addressed in Sect. 5 then is whether there nevertheless is a need for new TRIPS maximum standards or ceilings—not only for goods or services that rely on the absence of IP protection in order to be freely traded around the globe, but for all subject matter that should be part of a global commons.

2 IP Protection as a Barrier to Trade: The Situation Before TRIPS

About 10 years before TRIPS created global minimum IP standards, several cases arose where IP protection and enforcement served as trade barrier and was challenged as inconsistent with GATT rules. This occurred in times when—similar to the current age of unilateral and bilateral advances beyond multilateral standards—there was great discrepancy in national and international standards of IP protection. In 1981 and 1987, Canada and the European Community (EC) launched two separate complaints against Section 337 of the United States Tariff Act (1930) and its application in cases of alleged patent infringement. After its revision in 1974, Section 337 primarily served as tool to prevent allegedly patent infringing imports into the US and has to be seen in the wider context of the US policy in the 1970–1980s to counter what it viewed as inadequate IP protection abroad: The US felt its leading role in technological innovation threatened by quickly developing countries especially in Asia whose technological rise the US viewed as the result of free-riding on American innovations. Since international IP protection appeared insufficient to address the problem, and reform of the international IP system under

⁷ On the origin of Section 337 see W. Watson (2012), Still a Protectionist Trade Remedy: The Case for Repealing Section 337, CATO Policy Analysis of 19 September 2012. He explains that legislative changes to Section 337, especially in 1974 when the International Trade Commission (ITC) with formal adjudication procedures that highly resemble a court trial was newly created, were intended to make the law more effective as a patent enforcement mechanism. Since 1974, more than 90 % of the cases under Section 337 relate to allegedly patent infringing imports.

⁸ See B. Sadler (1992), Intellectual Property Protection through International Trade, 14 Hous. J. Int'l L. 1992, 393, 393–395.

the umbrella of WIPO was not promising, the US relied on two unilateral measures to address insufficient IP protection abroad:

- 1. Under Section 301 of the Trade Act (1974), the US could withdraw concessions under existing trade agreements or unilaterally provided, for example by imposing higher tariffs, if a country was found not adequately protecting IP rights by US right holders.
- 2. Under Section 337 (Section 337), the US had created a special mechanism to block allegedly IP infringing imports from reaching the US domestic market and entering the channels of commerce.

The US had used both mechanisms strategically before and during the Uruguay Round Negotiations to push for a multilateral accord with significantly enhanced standards of IP protection and enforcement. While these measures facilitated the emergence of TRIPS, Section 337 had come under attack prior to TRIPS: After Canada unsuccessfully challenged Section 337 as a breach of free trade rules under GATT, the EC brought a new complaint in 1987. The EC argued that procedures under Section 337 subjected imported goods to a treatment which was less favorable than the treatment accorded by US federal district courts to goods of national origin in patent infringement suits. For the EC, this amounted to a breach of the national treatment rule in Article III:4 GATT which could not be justified under the general exception rule for IP rights in Article XX(d) GATT.

To establish whether there is "less favourable" treatment under Article III:4, the Panel assessed whether or not Section 337 *negatively affected the conditions of competition* for imported goods compared to like domestic products. In its decision, the Panel found such negative impact and hence a breach of Article III:4 in relation to the following features of the remedies available against allegedly patent infringing imports in front of the International Trade Commission (ITC) established under Section 337:

- (i) the availability to complainants of a choice of forum in which to challenge imported products, whereas no corresponding choice is available to challenge products of United States origin;
- (ii) the potential disadvantage to producers or importers of challenged products of foreign origin resulting from the tight and fixed time-limits in proceedings under Section 337, when no comparable time-limits apply to producers of challenged products of United States origin;

⁹ F. Emmert (1990), Intellectual Property in the Uruguay Round: Negotiation Strategies of Western Industrialised Countries, Mich. J. Int'l L. 1990, 1317, 1344, 1395–1396.

¹⁰ GATT Panel Report, United States Section 337 of the Tariff Act of 1930, L/6439, adopted 7 November 1989, BISD 36S/345. For a general discussion of the Section 337 cases in light of national treatment under GATT and TRIPS see G. Evans (1996), The Principle of National Treatment and the International Protection of Intellectual Property, EIPR 1996, 149, 154–156. For a defence of Section 337 as a necessary tool to protect US IP interests see M. Modak-Truran (1988), Section 337 and GATT in the Akzo Controversy: Post-Omnibus Trade and Competitiveness Act Analysis, 9 Nw. J. Int'l L. & Bus. 1988, 382.

(iii) the non-availability of opportunities in Section 337 proceedings to raise counterclaims, as is possible in proceedings in federal district court;

- (iv) the possibility that general exclusion orders may result from proceedings brought before the ITC under Section 337, given that no comparable remedy is available against infringing products of United States origin;
- (v) the automatic enforcement of exclusion orders by the United States Customs Service, when injunctive relief obtainable in federal court in respect of infringing products of United States origin requires for its enforcement individual proceedings brought by the successful plaintiff;
- (vi) the possibility that producers or importers of challenged products of foreign origin may have to defend their products both before the ITC and in federal district court, whereas no corresponding exposure exists with respect to products of United States origin.

The Panel then considered whether the inconsistencies with Article III:4 can be justified under Article XX(d) GATT. As a measure that seeks "to secure compliance with" US patent law, Section 337 in particular needed to be "necessary" for this purpose. Here the Panel held that the defendant seeking to justify a measure bears the burden of showing that for all those elements found inconsistent with GATT, no "alternative measure which it could reasonably be expected to employ and which is not inconsistent with other GATT provisions is available to it."12 If no GATT consistent measure is reasonably available, "a contracting party is bound to use, among the measures reasonably available to it, that which entails the least degree of inconsistency with other GATT provisions." Against this benchmark, the Panel found that the US was unable to show for essentially all of the discriminatory aspects of Section 337 how they would be "necessary" to secure compliance with US patent law. Only with regard to the need for general in rem exclusion orders against imported products, did the Panel not rule out entirely that there could sometimes be objective reasons for such orders—even though no equivalent measure was provided against products of US origin. It suggested that other than in these cases, the US could achieve compliance with GATT by providing for equivalent remedies against infringing domestic products. For all other aspects that had been found discriminatory under Article III:4, the US had not provided any specific explanation of how they would be "necessary" to secure compliance with US patent law under Article XX(d). Section 337 thus was found in breach of the US obligations under GATT.

In assessing the decision, two aspects stand out: First, both substantive IP laws as well as IP enforcement measures are subject to the GATT national treatment rule, which not only prohibits *de jure* but also *de facto* discrimination: IP protection or

¹¹GATT Panel Report, United States Section 337 of the Tariff Act of 1930, L/6439, adopted 7 November 1989, BISD 36S/345, para. 5.20.

¹²GATT Panel Report, United States Section 337 of the Tariff Act of 1930, L/6439, adopted 7 November 1989, BISD 36S/345, para. 5.26–5.27.

¹³ Ibid.

enforcement rules hence may not treat imported goods less favourably compared to like domestic products in a way that negatively impacts on the conditions of competition between them. Whether and when this is the case will of course be a matter of the individual circumstances. Second, in order to justify an IP-related breach of GATT obligations under Article XX(d), the defendant has to show that its GATT-inconsistent measures are *necessary* to secure compliance with *IP laws that are themselves consistent with GATT*. ¹⁴ Necessity then requires to show individually for each element breaching GATT that there is no less trade restrictive alternative reasonably available. This test can operate as a rather strict and detailed review of domestic IP-related measures and potential alternatives.

At the same time, the decision leaves open a core question on the IP-trade interface: As the dispute concerned the discriminatory application of a specific IP enforcement remedy available only against imported goods, it did not address whether substantive standards of IP protection as such can breach GATT standards. As the discussion of post-TRIPS cases and scenarios in Sect. 4 indicates, this is a crucial factor in an increasingly fragmented international landscape of distinct standards of IP protection and enforcement which raise the potential for IP serving as trade barrier.

3 The Harmonizing Effect of the TRIPS Agreement

The TRIPS Agreement marks a crucial turning point in the trade—IP relationship. The harmonising effect of the multilateral standards set by TRIPS meant that if implemented, there were significantly less differences amongst IP standards around the world. Although TRIPS does not intend to serve as a unifying code and includes significant flexibility to tailor local laws to the domestic circumstances, it sets core minimum thresholds for the protection and enforcement of basically all IP rights. While companies in IP demanding countries expect TRIPS compliance in export markets, developing countries in turn expected to be free from further unilateral measures such as Section 337. Starting in 1995, international trade of IP-related goods (or services) operates with TRIPS minimum standards in the background.

TRIPS created global minimum standards of IP protection and enforcement "to reduce distortions and impediments to international trade". At the same time, based on the experiences with unilateral measures that have a trade-distorting effect such as Section 337, TRIPS aimed "to ensure that measures and procedures to enforce intellectual property rights do not themselves become barriers to legitimate trade". This is not only a declared goal in the TRIPS Preamble, but was also included in the general IP enforcement obligations in Article 41:1 TRIPS: They require all WTO members to apply IP enforcement remedies in a way that does not

¹⁴ See Sect. 4.2 for a further discussion.

¹⁵ See TRIPS Preamble, para. 1 and the last sentence in Article 41:1 TRIPS.

create barriers to legitimate trade. As Braga suggests, this language can be explained as a response to the experiences of the EC and Japan with traderestrictive enforcement regimes focussing on infringing imports such as Section 337. ¹⁶ In that sense, Article 41:1, as well as several other specific provisions in the enforcement part of TRIPS and especially its section on border measures, can be understood as binding maximum standards or ceilings which constrain the ability of WTO members to introduce TRIPS-plus IP enforcement rules. As I have argued elsewhere, these ceilings prohibit, for example, extending border measures to goods in transit as soon as this creates "barriers to legitimate trade". ¹⁷ The disputes initiated by India and Brazil against the seizure of generics in transit through EU ports shows that there is indeed a danger of TRIPS-plus IP enforcement functioning as trade barrier. ¹⁸

This is just one example how international IP law and policy has moved beyond the multilateral standards set in 1994. The tendencies to agree to additional "TRIPS-plus" IP protection and enforcement rules in international treaties has created a vast network, commonly referred to as a "spaghetti bowl" of bilateral and regional treaties with often different standards and norms. In addition, unilateral advances serving the needs of domestic IP holders complicate the picture. Although some further harmonisation has been achieved through WIPO, especially in the area of copyright, none of these treaties have true global membership. This leaves us with a rather fragmented image of the international IP system where IP-related trade between individual countries is governed by distinct agreements, somewhat loosely connected by the notion of minimum standards and principles of national treatment and MFN. The "multilateralization effect" of these non-discrimination principles allows right holders from across the globe to enjoy the highest standards of protection and enforcement one country has agreed to or offers in its national law. 19 At the same time, this fragmented system with "peaks" in protection available in different countries for different IP rights also has the tendency to create new trade barriers: For all those who rely on the absence of IP

¹⁶ C. Primo Braga (1989), The Economics of Intellectual Property Rights and the GATT: A View from the South, 22 Vand. J. Transnat'l L. 1989, 243, 249.

¹⁷ See T. Jaeger & H. Grosse Ruse – Khan (2009), Policing Patents Worldwide? EC Border Measures against Transiting Generic Drugs under EC- and WTO Intellectual Property Regimes, 40 IIC 2009, 502–538 and H. Grosse Ruse – Khan (2011), A Trade Agreement Creating Barriers to International Trade? ACTA Border Measures and Goods in Transit, 26 Am. U. Int'l L. Rev. 2011, 645–726. Seizing goods in transit will often amount to a barrier for legitimate trade as soon as there is no evidence that the trade is being diverted onto the domestic market of the transit country – for example based on the operation of a so called "manufacturing fiction" which assumes that goods in transit are domestically produced when assessing whether they violate IP rights.

¹⁸ Request for Consultations by India, European Union and a Member State–Seizure of Generic Drugs, WT/DS408/1 of 19 May 2010; and Request for Consultations by Brazil, European Union and a Member State – Seizure of Generic Drugs in Transit, WT/DS409/1 of 19 May 2009.

 $^{^{19}}$ TRIPS-plus standards in almost all instances add another layer of protection on top of existing standards under TRIPS which then – if falling under the ambit of the national treatment or MFN clauses in TRIPS, BC or PC – are made available to all right holders from WTO members.

protection in trading goods internationally or providing services across the world, a newly introduced layer of TRIPS-plus protection in one of the markets they serve functions as a barrier to trade.²⁰

Comparing this post-TRIPS environment with pre-TRIPS era in the 1970–1980s when disputes over the level of IP protection became more acute, interesting parallels emerge. One aspect of the early GATT litigation on IP as a trade barrier in the 1980s is that it occurred in a time when the disparities and differences in IP protection between countries where significant. TRIPS then created a level playing field of harmonised protection. Now, with these multilateral standards increasingly superseded by unilateral, bilateral and regional expansions of IP protection beyond TRIPS, a situation similar to the pre-TRIPS era emerges. Hence, post-TRIPS disparities based on TRIPS-plus IP standards may again invite GATT challenges to IP protection and enforcement.

In addition, the unilateral measure that motivated "trade-related" enforcement ceilings such as Article 41:1 TRIPS is still very much alive: US border enforcement involving the ITC has, after its first peak in 1980s and downturn in the 1990s, gained renewed importance since the turn of the millennium with new filings at an all-time high in 2011. Especially in the context of information technology goods, a revised Section 337²² has increasingly been used to seal off the US market by blocking allegedly patent infringing imports—even where the patented technology merely concerns a tiny aspect of a complex product involving perhaps hundreds of patents. As a lot of the discriminatory aspects of Section 337 proceedings against imports remain unchanged and appear to cause even greater advantages over district court proceedings against domestically produced goods nowadays, the findings of GATT breaches in the *US-Section 337* Panel Report remain valid and in need of being implemented.²³ Watson for example observes the rise of litigation

²⁰ See Sects. 4 and 5.

²¹ United States International Trade Commission, Facts and Trends Regarding USITC Section 337 Investigations, 2013 Update of 15 April 2013. See also C. Chien (2008), Patently Protectionist? An Empirical Analysis of Patent Cases at the International Trade Commission, 50 William & Mary Law Review 2008, 92–93.

²² As discussed by W. Watson (2012), Still a Protectionist Trade Remedy: The Case for Repealing Section 337, CATO Policy Analysis of 19 September 2012, the Omnibus Trade and Competitiveness Act of 1988 (OTCA) included a number of amendments to Section 337 designed to make the law a more effective avenue for pursuing patent disputes. These included a new patent-specific cause of action under which complaints need not allege any injury to domestic industry and clarifications that mere licensing activity in the US, regardless of manufacture, was enough to bring a claim before the ITC.

²³ In order to address the Panel Report, Section 337 now allows for filing of counterclaims and for stays of District Court actions while an ITC action pending. The US has also eliminated the statutory 12–18 month timelines for completion of ITC action, but kept the requirement for conclusion at "earliest practicable time" and the requirement of a target date for final determination within 45 days from the start of an action. The other aspects found in breach of GATT however remain intact – for example the greater deference of the Court of Appeals for the Federal Circuit (CAFC) to ITC vis-à-vis District Court decisions; the availability of general in rem exclusion orders only in front of the ITC; and the inapplicability of the "eBay test" for injunctive relief under Section 337(d)(1).

brought by non-practicing entities (patent trolls), coupled with the inapplicability of the "eBay test" (which essentially ensures that in domestic patent infringement proceedings, injunctive relief is not automatically granted) and inability to consider a duty to license standard essential patents on fair and reasonable and non-discriminatory (FRAND) terms effectively makes the ITC the preferred forum for blocking IT products from entering the US market.²⁴

In sum, we are looking at an increasingly complex picture where TRIPS-plus protection and enforcement can serve as barrier to trade. The next section examines one example based on TRIPS-plus GI protection agreed in EU FTAs. Another one not further discussed here relates to tendencies to expand border enforcement measures or even substantive trademark rights to cover goods in transit—leading *inter alia* to the seizures of generic drugs mentioned above.²⁵

4 Post-TRIPS Scenarios: Additional Protection of Geographical Indications via EU FTAs

In order to secure exclusive control over famous terms like "Feta", "Gorgonzola" or "Prosciutto", strong protection of geographical indications (GIs) abroad is an important part of the external trade agenda of the EU. It perceives pushing for additional protection of GIs not only at home, but also abroad as an essential element for promoting its own exports of GI protected goods in third countries where these terms are often considered generic: In order to tackle "misuse and counterfeiting" of famous GIs abroad which "limits access to certain markets and undermines consumer loyalty", the EU has concluded several trade and economic partnership agreements which contain additional protection for GIs beyond the multilateral standards of TRIPS. ²⁶ In addition to heightened substantive standards of protection (which tend to expand the additional protection for wines and spirits under TRIPS to other GIs), these agreements usually contain an annex with a list of names to be protected as GIs in the territory of the parties (which tend to contain very long listings of EU GIs, but no or few GIs of their trading partners). ²⁷

While the EU views the "inadequate" GI protection abroad as a trade barrier, "new world" countries such as the US take an opposite view. For their exporters of

²⁴ Ibid. The ITC exclusion order issued on request of Samsung (an eligible complainant, as it conducts patent licensing in the US) against certain Apple mobile phone products (as goods manufactured abroad) is a case in point which in the end required the veto of the US president to ensure that Apple's defence based on the need to license the patented technology on FRAND terms is given effect; see J. Contreras (2013), The Topsy-Turvy ITC, InfoJustice of 16 June 2013. ²⁵ For a more detailed discussion on these measures see H. Grosse Ruse – Khan (2013), An International Trade Perspective on Transit Seizures, 3–4 BMM Bulletin 2013, 142–149.

²⁶ For details, see the website of TG Trade on GIs which lists agreements with Korea, Singapore, Colombia, Peru, Central American States, the Ukraine and several ongoing negotiations.

²⁷ See for example the List annexed to the EU-Singapore FTA or the EU-Central America FTA.

cheese, meat or other foodstuff, the TRIPS-plus protection mandated for all the GIs listed in the EU FTAs serves as a barrier to trade: For example, in a letter written by a group of about 50 US Senators to US Trade Representative (USTR) Froman in April 2014, the Senators complain about the trade-distorting effect of TRIPS-plus GI protection pushed by the EU:

In country after country, the EU has been using its FTAs to persuade trading partners to impose barriers to U.S. exports under the guise of protecting GIs. This trade-damaging practice is concerning anywhere, but it is most troubling where the U.S. has an established FTA or is actively negotiating a new agreement.²⁸

News reports in the US notice that "since the EU started putting restrictions on food names in the mid-1990s, they've spread to other countries", quoting the US Dairy Export Council.²⁹ Also the EU–Korea FTA contains a list of GIs of each party (including Feta and Gorgonzola in the case of the EU) which the other party undertakes to protect in accordance with the substantive GI protection rules of the FTA.³⁰ According to the US Dairy Export Council, these TRIPS-plus protections of GIs "banned the sale of U.S. Feta, Asiago, Gorgonzola and Fontina to Korea." For the US exporters, this significantly affects their competitiveness in markets abroad—in particular where a US FTA had secured additional market access which then is undermined by EU GI protection.

4.1 Violations of GATT Non-discrimination and Quantitative Restriction Rules

The active push for stronger GI protection by the EU in third country markets where its goods compete with those using similar or identical names indicating a specific geographic origin for which EU producers claim ownership thus serves as a barrier to trade. Names which have been free to use prior to the EU FTA—for example because they were considered generic—become exclusive to EU producers once they are included in a list of protected GIs in the FTA. While there is usually an opportunity for competitors (such as US companies selling goods under an identical or similar name) to challange a listed GI, for example arguing that the relevant consumers consider the listed name as generic, this is subject to strict time limits. The so established protection for GIs often can be enforced via strong border

²⁸The full text of the letter is available at http://www.toomey.senate.gov/?p=press_release&id=1297.

²⁹ L. Dennis (2014), Europe tells US to lay off Brie and get its own cheese names, 6 March 2014. ³⁰ See Articles 10–18 to Article 10–26 and Annex-10A&B of the EU–Korea FTA. In a nutshell, the

protection expands the higher level of protection for wines and spirits in TRIPS to all GIs and ensures that trademark rights do not interfere with GIs – subject to trademarks registered and/or used prior to the entry into force of the FTA.

³¹L. Dennis (2014), Europe tells US to lay off Brie and get its own cheese names, 6 March 2014.

measures that prevent the importation of goods alleged of infringing a protected GI.³² The legal question then is the extent to which such TRIPS-plus protection of GIs may be actionable under GATT: For example, US producers that had imported cheese into Korea using terms like "Feta" or "Gorgonzola" for which EU producers now enjoy protection by virtue of the EU–Korea FTA could argue that the fact that their product names now are IP infringing amounts to a breach of the MFN rule under Article I GATT: GI protection afforded to cheese products from the EU could be seen as a measure which grants an "advantage" that is not "immediately and unconditionally" made available to "like" cheese products from the US. In addition, border measures imposed against GI-infringing US cheese products could be understood as "quantitative restrictions on imports" prohibited under Article XI:1 GATT.

Since the scope of the MFN rule under Article I covers both border measures and internal measures (such as regulations affecting the sale, distribution or use of products) falling under Article III:2 and 4 GATT, substantive GI protection as well as its enforcement at the border is actionable under the MFN rule.³³ The grant of GI protection for EU cheese products (such as Feta or Gorgonzola) is also an "advantage, favour, immunity or privilege" under Article I since the exclusivity if confers creates more favourable competitive opportunities for EU products.³⁴ The core question then is whether EU GI protected cheese products (for example Feta cheese from Greece) and those from the US (such as those which resemble Feta, perhaps use the name 'Feta', but do not originate from Greece) are 'like' products. One the one hand, the traditional criteria for assessing likeliness in WTO/GATT cases—product characteristics, consumer preferences, customs classifications and products' end uses³⁵—do not necessarily imply that the existence of GI protection is a distinguishing factor. Process and production methods—often a relevant element of GI protection—generally are not considered when examining likeliness, especially if they have no bearing on the physical characteristics of the product.³⁶ Finally, the Panel in EC-GIs, asked to rule on the consistency of the EC GI regime

³² See for example Article 10.67 of the EU-Korea FTA, in particular in note 76.

³³ See P. Van der Bossche & W. Zdouc (2013), The Law and Policy of the World Trade Organization, p. 321. This follows also from the US–Sec. 337 Panel report where the Panel held both the substantive US patent law as well as its enforcement via Section 337 as falling under Article III:4 GATT; see section 2 above.

³⁴ See Panel Report, European Communities – Regime for the Importation, Sale and Distribution of Bananas, Complaint by Guatemala and Honduras, WT/DS27/R/GTM, WT/DS27/R/HND, adopted 25 September 1997, as modified by Appellate Body Report WT/DS27/AB/R, DSR 1997:II, p. 695, para. 7.239 and Panel Report, United States – Certain Measures Affecting Imports of Poultry from China, WT/DS392/R, adopted 25 October 2010, DSR 2010:V, p. 1909, para. 7.415–417. This is clearly the case when this exclusivity is invoked against the competing product from the US, but could be argued to exist in general based on the exclusive rights a GI holder enjoys and which facilitate various commercialisation opportunities.

³⁵ See P. Van der Bossche & W. Zdouc (2013), The Law and Policy of the World Trade Organization, p. 325–328.

³⁶ Ibid., p. 328.

(whereby imported products only received GI protection in the EC when their country of origin offered equivalent protection for EC GI products), held that GI protected products of EC origin and imported products comparable to those registered under a GI in the EC are like products under Article III:4 GATT.³⁷

On the other hand, consumer tastes and habits may well be such that they indeed distinguish between the "original" Feta and similar cheese, which may have the same characteristics but is not from Greece. That is particularly likely if consumers recognise the GI name as indicating the geographic origin of the product—rather than merely describing a product of a certain kind or having specific properties, which the competing US imports may also feature. Furthermore, distinguishing goods based on whether they originate from a place associated with the name under which they are sold could be argued to find support in Article IX:6 GATT as well as Articles 22-24 TRIPS which establish substantive minimum standards of GI protection. However, neither Article IX:6 GATT nor TRIPS extends to names which are not "distinctive", but rather are "customary in common language as the common name for such goods". 38 Once the common understanding of a term the EU lists as a protected GI under one of its FTAs is rather reflecting generic characteristics of products than indicating geographic origin, providing GI protection to that name does not appear as a recognised distinguishing feature in similar products test under GATT. At least in these circumstances, GI protected goods (such as Feta cheese from Greece) and not-GI protected goods with similar characteristics and end uses (such as "Feta-style" cheese from the US) are like products under Article I GATT. Since the advantage GI protection confers on goods listed in the EU-Korea FTA as protected by GIs is not granted "immediately and unconditionally" to like US products, there is in these situations a prima facie case of inconsistency with the MFN standard under Article I GATT.

In addition, border measures applied to seize imported goods which infringe the TRIPS-plus GI protection mandated by EU FTAs are likely to amount to a quantitative restriction and hence breach Article XI:1 GATT. None of the exceptions provided in Article XI:2 GATT appears to be of relevance for import seizures based on IP protection. As the analysis in the next section will show, the more lenient requirements for finding border measures in breach of GATT under Article XI in the end do not matter much: Since the broader prohibition under Article XI essentially captures only the border measure aspect, this can be justified under Article XX(d) as securing compliance with GI protection laws—if those laws themselves are GATT consistent. Therefore, the core question in any case is whether the TRIPS-plus GI protection *as such* is GATT consistent. This in turn is a question to be examined solely under Articles I and III—since additional

³⁷ Panel Report, European Communities – Geographical Indications, WT/DS/174R of 15 March 2005, para. 7.265. The Panel explained that "[i]t is axiomatic that one must compare apples with apples and oranges with oranges. In this dispute, it is not contested that Tasmanian apples may be like pommes de Savoie and Florida citrus may be like cítricos valencianos for the purposes of Article III:4 of GATT 1994."

³⁸ See Article IX:6 GATT and Article 24:6 TRIPS respectively.

substantive IP protection does not involve any specific import restriction to which Article XI could be applied.

4.2 Options for Justification Under Article XX(d) GATT

In the law on international trade in goods, Article XX GATT serves as a general exception clause which, in a nutshell, ensures that WTO Members can take into account and protect objectives, values and interests outside the trade context even if measures giving effect to these interests and objectives technically amount to a breach of specific obligations under GATT. The provision thereby acknowledges that the sovereign right of WTO Members to pursue these interests and objectives can take precedence over trade commitments.

Ever since the Panel Report in the US-Sec.~337 dispute, WTO case-law has examined under Article XX d) whether the measures to be justified meet the following, cumulative requirements:

- 1. the measures must be *designed to secure compliance* with national laws or regulations that themselves are "not inconsistent" with GATT;
- 2. the measures are "necessary" to secure compliance with those laws or regulations. 41

In addition, the chapeau of Article XX—applicable to all individual exception under Article XX—requires that the measures are "not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade".

Regarding measures *enforcing* TRIPS-plus GI protection, justification under Article XX(d) requires that these measures are (1) *necessary* to secure compliance (2) with *GATT consistent* IP laws. Although GIs are not among "trade marks", "copyrights" and "patents" mentioned in Article XX(d), it seems reasonable to apply the provision also to other IP rights commonly accepted—in particular those

³⁹Other than the interests of IP right holders, Article XX GATT inter alia concerns measures "necessary to protect human, animal or plant life or health", "public morals" or relating to environmental protection. With regard to trade in services, Article XIV GATS contains a similar exception.

⁴⁰R. Wolfrum, P. Stoll & H. Hestermeyer (2011), WTO – Trade in Goods, p. 454; P. Van der Bossche & W. Zdouc (2013), The Law and Policy of the World Trade Organization, p. 545.

⁴¹ Appellate Body Report, Korea – Measures Affecting Imports of Fresh, Chilled and Frozen Beef, WT/DS161/AB/R, adopted 10 January 2001, DSR 2001:I, p. 5, para. 157; Panel Report, Canada – Measures Relating to Exports of Wheat and Treatment of Imported Grain, WT/DS276/R, adopted 27 September 2004, upheld by Appellate Body Report WT/DS276/AB/R, DSR 2004:VI, p. 2817, para. 6.218 (essentially applying these requirements in a three-step test); GATT Panel Report, United States Section 337 of the Tariff Act of 1930, L/6439, adopted 7 November 1989, BISD 36S/345, para. 5.22.

for which WTO Members have to foresee minimum standards under TRIPS.⁴² The first crucial issue is whether the laws of which measures seek to secure compliance with are themselves "not inconsistent" with GATT. As demonstrated above, FTA-mandated TRIPS-plus GI laws may themselves breach Article I GATT if they monopolise the use of names that consumers in the relevant market rather associate with common characteristics of the products in question than as indicating geographic origin. In these circumstances, the TRIPS-plus GI protection itself is inconsistent with GATT so that its enforcement cannot be justified under Article XX(d).

The same result of course is reached if one focusses on additional GI protection as the relevant measure that needs to be justified: As held by the Panel in EC-GIs, IP laws that themselves are in breach of GATT cannot be justified under Article XX (d).⁴³ In essence, both when this type of additional GI protection as such is challenged under Article I (or Article III) and when (border) measures enforcing this protection are challenged under Article XI, the justification under Article XX GATT fails at the level of the GATT consistency test. Generalising from this example to other cases where TRIPS-plus protection as such is found in breach of GATT norms, justifications are likely to fail the GATT consistency test once the IP-related measure is inconsistent with a GATT rule that does not focus on the (border) enforcement element (such as Article XI), but rather allows to challenge domestic regulation (such as Article I, III): Once domestic regulation as such is at stake, there is usually no distinct law that regulation seeks to ensure compliance with. That regulation, if found in breach of GATT, then fails the GATT consistency test under Article XX(d) and hence cannot be justified. In these instances, further questions of the general exception clause regarding necessity and the chapeau will usually no longer be decisive.

On the other hand, if the GATT breach solely lies in the (border) enforcement element, the IP law that measure seeks to ensure compliance with needs to be examined separately for its GATT consistency. In most instances, such a law will be consistent with GATT—with the main exception being cases of product-based discrimination under Articles I or III. Then, further questions arise about whether the measures are (1) "necessary" to secure compliance with IP laws; and (2) consistent with the chapeau of Article XX. The necessity test primarily checks whether there is a less restrictive, equally effective measure reasonably available, taking further the degree of trade-restrictiveness and the importance of the interests protected into account. ⁴⁴ Usually, necessity will be met if the measure simply ensures that the right holder has an effective remedy against IP infringement.

⁴² This follows not only from the term "including" in Article XX(d), used when listing laws protecting copyrights, patents and trademarks, but has been applied to this effect without further discussion in the EC–GIs Panel Report, Panel Report, European Communities – Geographical Indications, WT/DS/174R, 15 March 2005, para. 7.331.

⁴³ Ibid., para. 7.331–332.

⁴⁴ See the discussion in relation to transit seizures above, Sect. 3.

That however may be different if the measure does not meet the basic standards of procedural guarantees under part III of TRIPS on the enforcement of IP rights. Then there usually will be a less-restrictive measure available that is equally effective in achieving the TRIPS enforcement standards.

Under the chapeau of Article XX, the core question will be whether the measures are applied in a manner that constitutes "arbitrary or unjustifiable discrimination between countries" or a "disguised restriction on international trade". Focus is on the application of the measure, not the additional IP protection as such (even if it goes beyond TRIPS). In general, the chapeau is an expression of the principle of good faith that controls the exercise of rights (here the right to use the exception clauses under Article XX) by states. 45 While this contribution cannot discuss in detail the WTO case-law on the chapeau. 46 the latter primarily functions as a safeguard against abusive reliance on the exception in order to engage in discrimination that bears no relation to the objective of the measure or in concealed protectionism. 47 Whether the application of IP (border) enforcement measures is applied in such a way depends very much on the facts at hand. It may well be that targeting specific types of imported goods or imports from a particular origin (compared to other imports or domestic goods) without valid justifications or based on reasons not related to the stated objective of the measure falls under the chapeau.

4.3 The Role of TRIPS

The result of applying GATT non-discrimination obligations to TRIPS-plus measures hence is that IP protection *as such* (not only its enforcement) can violate GATT trade rules. This may appear odd, and one may be tempted to rethink the GATT consistency test when applied to IP protection laws: Should there be a core of IP protection which is outside the GATT consistency test? Indeed, the TRIPS Agreement provides for a core of IP protection and enforcement standards whose implementation cannot, as such, be considered as an actionable trade restriction under GATT. The WTO Agreement (which includes both GATT and TRIPS) creates coherence to the extent that complying with an obligation under one agreement cannot amount to a breach of the other. National measures *required* for properly implementing TRIPS hence cannot be considered a violation of GATT—by construing GATT obligations, when applied to IP related measures,

⁴⁵ Appellate Body Report, United States – Import Prohibition of Certain Shrimp and Shrimp Products, WT/DS58/AB/R, adopted 6 November 1998, DSR 1998:VII, p. 2755, para. 158.

⁴⁶ See P. Van der Bossche & W. Zdouc (2013), The Law and Policy of the World Trade Organization, pp. 572–581.

⁴⁷ Ibid. and C.F. Lo (2013), The Proper Interpretation of 'Disguised Restriction on International Trade' under the WTO: The Need to Look at the Protective Effect, 4 J. Int'l. Dispute Settlement 2013, 111–137.

in the context of TRIPS minimum standards. The example of GI protection above shows that this works reasonably well: The question whether GI protected goods and non-protected goods sharing similar characteristics and end uses are "like products" under Articles I and III GATT can be informed by the minimum standards of GI protection and exceptions thereto. The customary rules of treaty interpretation, here in form of Article 31:2 VCLT, certainly require a contextual understanding to take into account all annexes of an agreement.

Striving for coherence with TRIPS however does not mean that the absence of a TRIPS violation guarantees compliance with GATT obligations. 48 As there is no hierarchy between TRIPS and GATT, obligations under the two agreements co-exist and apply cumulatively so that consistency with one does not necessarily imply consistency with the other. 49 TRIPS in most cases is a minimum standard agreement with some trade-related maximum standards or ceilings and general objectives and principles that affect the ability of WTO Members to modify TRIPS inter se. Beyond these limits, TRIPS does allow for much deviation which may well be TRIPS consistent but a breach of GATT. This is likely to be the case in particular in areas where trade-related implications and trade barriers based on IP rights were not foreseen at the time of the TRIPS negotiations. Those were informed primarily by the experiences with Section 337 as discriminatory IP border enforcement mechanism in the US. 50 TRIPS hence takes specific care to ensure that border measures contain trade-related maximum standards and that more generally, IP enforcement procedures are not applied as to "create barriers to legitimate trade". 51 If other areas of IP protection or enforcement not mandated by TRIPS nowadays develop into trade barriers, then their legality under TRIPS does not stand in the way of finding a breach of GATT. From a trade law perspective, ensuring coherence with TRIPS hence does not mean that consistency with TRIPS equals consistency with GATT.⁵²

The international IP system and especially TRIPS hence do not provide for complete and exclusive answers to legal questions about "trade-related aspects of

⁴⁸ Panel Report, European Communities – Geographical Indications, WT/DS/174R, 15 March 2005, para. 7.244.

⁴⁹ Ibid., para. 7.244 – referring further to the Panel report in Canada–Periodicals, at para. 5.17 and Appellate Body Report, Canada – Certain Measures Concerning Periodicals, WT/DS31/AB/R, adopted 30 July 1997, DSR 1997:I, pp. 449, 465. See generally on the relation between the WTO covered agreements Appellate Body Report, Argentina – Safeguard Measures on Imports of Footwear, WT/DS121/AB/R, adopted 12 January 2000, DSR 2000:I, p. 515, para. 81; Appellate Body Report, Korea – Definitive Safeguard Measure on Imports of Certain Dairy Products, WT/DS98/AB/R, adopted 12 January 2000, DSR 2000:I, p. 3, para. 74; and Appellate Body Report, European Communities – Regime for the Importation, Sale and Distribution of Bananas, WT/DS27/AB/R, adopted 25 September 1997, DSR 1997:II, p. 591, para. 7.160.

⁵⁰ See Sect. 2 above.

⁵¹ See Article 41:1 and the Preamble to TRIPS.

⁵² As Panel Report, European Communities – Geographical Indications, WT/DS/174R, 15 March 2005, para. 7.244 stated: a "harmonious interpretation" of TRIPS and GATT "does not require an interpretation of one that shadows the contours of the other."

intellectual property rights". International trade law, *inter alia* in the form of GATT, applies to trade barriers created by IP rights and their enforcement. The relative absence of international harmonisation prior to TRIPS triggered unilateral measures such as Section 337 in the US, which other countries have successfully challenged as violations of GATT. In today's post-TRIPS environment, the global standards set by TRIPS are increasingly superseded by national, bilateral or regional IP initiatives. As they again create significant differences in the level of IP protection and enforcement around the world, this creates a new potential for IP-based trade barriers. The cases examined show that TRIPS-plus protection and its enforcement certainly can amount to a breach of international trade rules. The remaining question is whether it may be preferable to introduce specific provisions in TRIPS that address the trade-distorting character of certain TRIPS-plus measures.

5 A Need for Further Maximum Standards (Ceilings) in TRIPS?

There are further examples that forms of IP "over-protection" can as a "new form of protectionism"⁵³ which inhibits global trade and dissemination in goods and services that rely on a robust public domain or exceptions and limitations to IP in the country of production: Strict liability for Internet service providers (ISPs) for the IP infringements of their users negatively affects an ISP's position on the market or the legality of its services-and may eventually influence its decision to serve a particular domestic market. The same applies to software developed by making use of copyright exceptions for achieving interoperability,⁵⁴ which may not be traded in countries that do not recognise such an exception. Domestic "patent thickets" in IT industries may prevent foreign innovative products from entering local markets—merely because of lack of legal security whether that product infringes any domestic patents. As examined above, enforcement mechanisms such as Section 337 add to the trade distorting effect. Various ways of extending patent protection for pharmaceutical products in domestic laws will inhibit the importation of generics from countries which do not adopt such extension or which for example follow a more stringent approach to patentable subject matter.

The insight underlying these examples is that a robust "public domain" (i.e. the absence of IP protection) and well-tailored boundaries of protection are not only important for consumers of IP and the general public, but also have enormous (economic) significance for the development and production of new innovative and

⁵³ F. Abbott (2009), Worst Fears Realised: The Dutch Confiscation of Medicines Bound from India to Brazil, Bridges Monthly of February–March 2009.

⁵⁴ Article 6 of the EC Directive 91/250/EEC on the legal protection of computer programs (Software Directive).

creative goods and services.⁵⁵ In a "knowledge economy" the free movement of basic knowledge is a crucial element. A knowledge economy is increasingly reliant on (scientific) knowledge and information as a resource for future innovations and hence must ensure its free circulation⁵⁶—next to providing incentives for the development and production of further knowledge and innovation via IP exclusivity or by other means. This implies that IP exclusivity must exist in balance with a strong public domain which safeguards the access, use and dissemination of the existing building blocks of knowledge.

Maximum standards or ceilings to IP protection can function as these kinds of safeguards. To secure global trade in goods and services that rely on a robust public domain or exceptions and limitations to IP, these safeguards must operate globally as well. If they are not internationally mandatory, domestic IP protection which oversteps such maximum standards serves as a barrier to enter that domestic market and so inhibits free trade. Equally, to establish a concept of an international free movement of information and knowledge,⁵⁷ the necessary access, use and dissemination guarantees must become an obligatory part of a global acquis. A "global commons" of scientific knowledge and other subject matter that should remain free from protection. This is not to replace the still necessary mandatory (minimum) standards of IP protection which incentivise further innovations and prevent discrimination and "free riding." But in an increasingly global market for the production, dissemination and use of goods and services affected by IP, these ceilings must become an additional element of the international IP system: They are necessary counterparts to minimum standards. They can complement the hitherto mainly one-sided international obligations to grant (ever more) IP exclusivity and therefore provide an overall balanced system of IP protection at the international level.⁵⁸ In short, in today's global knowledge-based economy, maximum standards to IP protection can be as relevant as minimum standards.

⁵⁵C. Geiger (2007), Copyright and the Freedom to Create, A Fragile Balance, 38 IIC 2007, 707. ⁵⁶In Europe, the EU Commission had set out the notion of the "fifth freedom" (beyond the free movement of goods, services, capital and labour): In its review of the Single Market (see COM 2007 724 final of 20 November 2007 – A single market for 21st century Europe) the Commission highlighted the need to promote free movement of knowledge and innovation as the "Fifth Freedom" in the single market. In relation to IP protection and copyright in particular, a Commission Green Paper (Copyright in the Knowledge Economy, COM(2008) 466/3) focuses on how research, science and educational materials are disseminated to the public and whether knowledge is freely circulating in the internal market. The Green Paper interestingly raises the issue of making certain copyright exceptions mandatory throughout Europe to achieve this goal (ibid., 6–20).

⁵⁷ Knowledge goods such as access to information only become global public goods whenever the welfare benefits from accessing and using them are available to users around the world; not only to those in the jurisdiction which allows access by drawing appropriate boundaries to IP protection; see B. Hugenholtz & R. Okediji (2008), Conceiving an International Instrument on Limitations and Exceptions to Copyright, Final Report of 6 March 2008, p. 38.

⁵⁸Compare R. Okediji (2006), The International Copyright System, ICTSD Issue Paper No. 15, p. 23.

While international trade law under GATT may go some way to deal with tradedistorting effects of TRIPS-plus protection and enforcement, it does not seem sufficient. As it relies on general non-discrimination standards whose application is very fact-specific and depends to a large extent on the notion of "like products", it may lack the legal certainty necessary for importers to decide to enter a market where they face such overprotection. In addition, the global trade rules concerning the provision of services that rely on reasonable limits to IP protection and enforcement are significantly more limited: The disciplines under the WTO General Agreement on Trade in Services (GATS), for example the national treatment rule in Article XVII, is subject to individual country commitments. Most importantly however, the trade perspective taken by GATT and GATS is clearly not the only and not even the most important view on IP protection and enforcement. Instead, IP affects almost all areas of social interaction. As Article 7 TRIPS recognises, IP regulation should be "conducive to social and economic welfare". In today's world with global dependencies, it is not sufficient to leave the fulfilment of this objective of TRIPS to individual WTO members. In light of unilateral, bilateral and regional TRIPS-plus initiatives, it is time for a multilateral response that set common maximum standards in areas where overprotection affects global trade as well as access to knowledge and its adaptive use. The problem of course is to achieve a multilateral consensus on what exactly these ceilings should encompass.

References

- Abbott, F. (2009), Worst Fears Realised; The Dutch Confiscation of Medicines Bound from India to Brazil, Bridges Monthly of February–March 2009, available at: http://ictsd.net/i/news/bridges/44192/ (accessed 20 May 2015)
- Primo Braga, C. (1989), The Economics of Intellectual Property Rights and the GATT: A View from the South, 22 Vand. J. Transnat'l L. 1989, 243, Tennessee: Vanderbilt Law School
- Chien, C. (2008), Patently Protectionist? An Empirical Analysis of Patent Cases at the International Trade Commission, 50 William & Mary L. Rev. 2008, 92, Williamsburg: William & Mary School of Law
- Contreras, J. (2013), The Topsy-Turvy ITC, InfoJustice of 16 June 2013, available at: http://infojustice.org/archives/29909 (accessed 20 May 2015)
- Dennis, L. (2014), Europe tells US to lay off Brie and get its own cheese names, 6 March 2014, available at: http://www.bilaterals.org/?europe-tells-us-to-lay-off-brie#sthash.JueixS0e.dpuf (accessed 20 May 2015)
- Emmert, F. (1990), Intellectual Property in the Uruguay Round: Negotiation Strategies of Western Industrialised Countries, Mich. J. Int'l L. 1990, 1317, Ann Arbor: Michigan Journal of International Law
- Evans, G. (1996), The Principle of National Treatment and the International Protection of Intellectual Property, EIPR 1996, 149, London: Sweet & Maxwell
- Grosse Ruse Khan, H. (2013), An International Trade Perspective on Transit Seizures, 3–4 BMM Bulletin 2013, 142
- Grosse Ruse Khan, H. et al. (2013), Principles for Intellectual Property Protection in Bilateral and Regional Agreements, 44 IIC 2013, 878, Munich: C.H. Beck

- Grosse Ruse Khan, H. (2011), A Trade Agreement Creating Barriers to International Trade? ACTA Border Measures and Goods in Transit, 26 Am. U. Int'l L. Rev. 2011, 645, Washington D.C.: American University Washington College of Law
- Hugenholtz, B. & Okediji, R. (2008), Conceiving an International Instrument on Limitations and Exceptions to Copyright, Final Report of 6 March 2008, available at: http://www.ivir.nl/ publicaties/hugenholtz/finalreport2008.pdf (accessed 20 May 2015)
- Jaeger, T. & Grosse Ruse Khan, H. (2009), Policing Patents Worldwide? EC Border Measures against Transiting Generic Drugs under EC- and WTO Intellectual Property Regimes, 40 IIC 2009, 502, Munich: C.H. Beck
- Lo, C.F. (2013), The Proper Interpretation of 'Disguised Restriction on International Trade' under the WTO: The Need to Look at the Protective Effect, 4 J. Int'l. Dispute Settlement 2013, 111, Oxford: Oxford University Press
- Modak-Truran, M. (1988), Section 337 and GATT in the Akzo Controversy: Post-Omnibus Trade and Competitiveness Act Analysis, 9 Nw. J. Int'l L. & Bus. 1988, 382, Chicago: Northwestern University School of Law
- Okediji, R. (2006), The International Copyright System, ICTSD Issue Paper No. 15, Geneva: ICTSD
- Sadler, B. (1992), Intellectual Property Protection through International Trade, 14 Hous. J. Int'l L. 1992, 393, Houston: University of Houston Law Center
- Van der Bossche, P. & Zdouc, W. (2013), The Law and Policy of the World Trade Organization, Cambridge: Cambridge University Press
- Watson, W. (2012), Still a Protectionist Trade Remedy: The Case for Repealing Section 337, CATO Policy Analysis of 19 September 2012
- Wolfrum, R., Stoll, P.-T., & Hestermeyer, H. (2011), WTO Trade in Goods, Oxford: Oxford University Press

Ways Out of the Trap of Article 1(1) TRIPS

Reto M. Hilty

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Abstract Article 1, paragraph 1, of TRIPS puts into effect a minimal-protection approach: In their domestic laws, Member States may provide more extensive IP protection, but they may not undermine the required level of protection. Although this required level is not carved in stone, lowering it would require a unanimous agreement of all Member States. Such an agreement seems highly unlikely since it is only the less industrialized countries that perceive the high level of IP protection as an impediment to their own socio-economic development. These, however, may not undercut the TRIPS standard independently, nor may groups of countries with similar interests jointly agree on lowering it.

Most of the countries concerned fell into that trap of TRIPS because they either underestimated the relevance of overly extensive IP protection when they joined the WTO system, or they wanted to benefit from the free trade amongst Member States provided by GATT, in particular by gaining access to global markets for their domestic products. To achieve this, they accepted the trade-off of a potentially inappropriate level of IP protection. Today, however, the WTO system seems to be even less of a

Prof. Dr. Reto M. Hilty is Director of the Max Planck Institute for Innovation and Competition, Munich, Professor (ad personam) at the University of Zurich and Honorary Professor at the Ludwig-Maximilians-University of Munich.

R.M. Hilty (⊠)

Max Planck Institute for Innovation and Competition, Munich, Germany e-mail: hilty@ip.mpg.de

concern compared to the fast increasing number of regional trade agreements that limit the freedom to consider domestic needs to a larger extent than TRIPS.

On the other hand, even countries with further developed economies are beginning to understand that inappropriate IP protection might be a serious concern. A forward-looking information society policy, for instance, may suggest substantial limitations of copyright protection. Such attempts, however, risk conflicting with Article 1, paragraph 1, of TRIPS as well. In other words, the trap is of a general nature; it may concern any Member State of the WTO. This chapter shows how potentially negative impacts of this given legal setting may nevertheless be reduced, based on the one hand on flexibilities outside the WTO system, and on the other on the leeway provided by TRIPS. It also explains why the maximum use of such avenues is justifiable.

1 The Minimum-Protection Approach and Its Consequences

According to the common view, TRIPS pursues a so-called "minimum protection approach". According to Article 1, paragraph 1, second sentence, "[m]embers may, but shall not be obliged to, implement in their law more extensive protection than is required by this Agreement". This wording at first glance corresponds to that of previous treaties; in particular, Article 19 of the Berne Convention explicitly states that "the Convention shall not preclude the making of a claim to the benefit of any greater protection which may be granted by legislation in a country of the Union". A corresponding provision in the Paris Convention is missing; however, it follows from Article 19 of the Paris Convention—and similarly from Article 20 of the Berne Convention—that Member States may deviate in one direction only: When agreeing to "special agreements" amongst each other, such agreements may "not contravene the provisions of this Convention"—in other words, they may not undermine its level of protection, but only exceed it.

As a matter of principle, this is also the requirement under Article 1, paragraph 1, TRIPS: "provided that such protection does not contravene the provisions of this

¹ Article 19 PC: "It is understood that the countries of the Union reserve the right to make separately between themselves special agreements for the protection of industrial property, in so far as these agreements do not contravene the provisions of this Convention". Article 2, Section 1, TRIPS states explicitly that Member States have to comply with that provision.

² Article 20 BC: "The Governments of the countries of the Union reserve the right to enter into special agreements among themselves, in so far as such agreements grant to authors more extensive rights than those granted by the Convention, or contain other provisions not contrary to this Convention". Article 9, paragraph 1, TRIPS generally refers to Articles 1 through 21 of the BC (version of 1971), with which Member States must comply, although exempting Article 6bis BC (dealing with moral rights).

Agreement". In contrast to the Paris and the Berne Convention, however, TRIPS does not solely focus on protection, which may be enhanced beyond the required level, but also contains certain elements of "counterbalance". In particular, the Preamble reveals diverging interests of the negotiating parties, e.g. recognising that public policy objectives of national systems may be developmental and technological objectives, but also that least-developed country Members have special needs "in respect of maximum flexibility in the domestic implementation of laws and regulations in order to enable them to create a sound and viable technological base". More concretely. Article 7 defines as objectives of the protection and enforcement of intellectual property rights not only the promotion of technological innovation, but also "the transfer and dissemination of technology, to the mutual advantage of producers and users of technological knowledge and in a manner conducive to social and economic welfare, and to a balance of rights and obligations". In addition, Article 8, paragraph 1, permits Member States "in formulating or amending their laws and regulations" to adopt "measures necessary to protect public health and nutrition, and to promote the public interest in sectors of vital importance to their socio-economic and technological development"; again, however, the reservation is made that such measures need to be "consistent with the provisions of this Agreement". Under the same reservation, paragraph 2 allows Member States to take appropriate measures "to prevent the abuse of intellectual property rights by right holders or the resort to practices which unreasonably restrain trade or adversely affect the international transfer of technology".

These attempts of the TRIPS negotiators to bestow somewhat more balance on this youngest overarching IP agreement lead to the result that the freedom of providing protection beyond the required level is not infinite.⁵ Exceeding a certain degree of protection could conflict with the mentioned balancing provisions: the more the protection covers, the more likely it is that public interests are jeopardised.⁶ Although the boundaries thus set are rather ambiguous and do not define clear borderlines, one may at least conclude that "more extensive protection" is permitted within a certain margin only. Insofar it falls short to reduce TRIPS to a minimal-protection approach; it rather should be regarded as a legal framework.⁷

³ Regarding the Transitional Arrangements see also infra fn. 33.

⁴ See also H. Grosse Ruse-Khan (2012), The Role of TRIPS in a Fragmented IP World, 43 IIC 2012, 881, 882.

⁵ Similarly S. Ricketson (2002), The Three-Step Test, Deemed Quantities, Libraries and Closed Exceptions, p. 43.

⁶ P. Drahos & J. Braithwaite (2002), Information Feudalism: Who Owns the Knowledge Economy?, pp. 43 et seq.; D. Acquah (2014), Extending the Limits of Protection of Pharmaceutical Patents and Data Outside the EU – Is There a Need to Rebalance?, 45 IIC 2014, 256, 282; C.M. Ho (2011), An Overview of 'TRIPS-plus' Standards, Loyola University Chicago School of Law Public Law & Legal Theory Research Paper No. 33, p. 251.

 $^{^7}$ H. Grosse Ruse-Khan (2012), The Role of TRIPS in a Fragmented IP World, 43 IIC 2012, 881, 884.

Nevertheless, Article 1, paragraph 1, TRIPS stipulates a one-way system. Deviations from any TRIPS provisions mandatorily have to lead to "more extensive protection". Although it is not entirely clear what "protection" in that context means, it would hardly be defendable for a Member State to grant a lower degree of exclusivity than required by TRIPS (e.g. a smaller scope of protection, broader limitations and so on) and compensate this with a longer term of protection. Even less imaginable would be cross-balances between different IP titles, for instance more extensive protection for geographical indications than requested (Articles 22 to 24 TRIPS) in exchange for a lower degree of exclusivity for patents. At least such an overall balance seems to be excluded insofar as TRIPS concretely stipulates a certain degree of exclusivity for each title which needs to be granted by the legislation of the Member States. 8

Of course such TRIPS provisions requiring a certain degree of exclusivity are not carved in stone, but—at least theoretically—could be subject to amendments. This, however, is extremely unlikely in view of the necessity of a unanimous agreement of the currently 160 Member States. During the first two decades of the existence of TRIPS this has proved to be largely impossible. All attempts to establish a "TRIPS plus" standard have failed. Likewise, apart from one very particular exception, any attempt to limit the scope of protection—although heavily discussed amongst scholars 10—has not stood a chance.

However, TRIPS seems not to be neutral with regard to amendments anyway, but rather biased. According to Article X, paragraph 6, of the WTO Agreement "amendments to the Agreement on TRIPS meeting the requirements of paragraph 2 of Article 71 thereof may be adopted by the Ministerial Conference without further formal acceptance process". But Article 71, paragraph 2, is limited to amendments "merely serving the purpose of adjusting to higher levels of protection

⁸ Including a constraint on the possibilities of Member States to reduce the degree of exclusivity based on limitations, compulsory licences and alike; see also infra 4.

⁹ In the Declaration on the TRIPS Agreement and Public Health, WT/MIN(01)/DEC/2 of 20 November 2001, No. 6, it was recognised "that WTO members with insufficient or no manufacturing capacities in the pharmaceutical sector could face difficulties in making effective use of compulsory licensing under the TRIPS Agreement". The Council for TRIPS therefore was instructed "to find an expeditious solution to this problem and to report to the General Council before the end of 2002". As a consequence, TRIPS was amended and Article 31^{bis} by decision of 6 December 2005 was introduced, according to which "Article 31(f) shall not apply with respect to the grant by it of a compulsory license to the extent necessary for the purposes of production of a pharmaceutical product(s) and its export to an eligible importing Member(s) . . ." (for details see www.wto.org/english/tratop_e/trips_e/wtl641_e.htm).

¹⁰ E.g. L.P. Ramsey & J. Schovsbo (2013), Mechanisms for Limiting Trade Mark Rights to Further Competition and Free Speech, 44 IIC 2013, 671, 689; A. Kur & M. Levin (2011), Intellectual Property Rights in a Fair World Trade System, notably pp. 3 et seq.; according to these authors (p. 4, fn. 2), about 200 articles could be found on "Intellectual Property, TRIPS" at the open access platform SSRN (http://papers.ssrn.com) in the year 2011; today (about three years later) more than 800 articles are available already.

¹¹ Apart from certain term extensions of the Transitional Arrangements in Part VI of TRIPS; see infra fn. 33.

of intellectual property rights achieved, and in force, in other multilateral agreements and accepted under those agreements by all Members of the WTO". Amendments leading to less extensive protection than currently provided under TRIPS—even if such amendments (theoretically) were "accepted ... by all Members of the WTO"—a priori could not be adopted without further formal acceptance. Admittedly, this would not result in major differences, because at the end of the day unanimity is required without exception; the result of this wording, however, emphasises the intention to stabilise the established one-way system.

2 Alternatives to Amendments of TRIPS

It lies in the very nature of IP protection that Member States pursue different interests subject to the situation of their own industries, or their economic circumstances. 12 In fact, from our present point of view it seems remarkable that almost all of the then 125 participating states were able to agree on the standard of protection determined by TRIPS at all. Whereas this agreement did not substantially exceed the pre-existing standards in the Western countries in 1994, for a number of lessdeveloped countries the adaptation to the TRIPS standard marked a huge step up. The reason why the countries involved at that time reached this compromise lies on one hand in the simple fact that a number of them were not represented when the deals were negotiated. ¹³ On the other hand the unanimity lies significantly in the special arrangement of the WTO, which combines more or less unrelated subject matters of global trade: Becoming a Member State implies the acceptance of the whole package, without any possibility of cherry-picking. As a result, participating countries were not in the position of negotiating TRIPS as one element of the package; rather, weaker countries were coerced by stronger ones in order to avoid negative trade consequences. 14 Beyond this, trade-offs by the signatories most probably were made because countries that today tend to oppose stronger IP regimes underestimated the impacts of this field of law on their national economy in the early 1990s.

Meanwhile, the diverging interests of those countries that became Member States of TRIPS can hardly be bridged based on trade-offs anymore. All Member States may benefit from the different advantages provided by the whole set of WTO agreements. There is no way to reach substantially more benefits in specific domains (like in particular a more liberal access to the global market for domestic products); therefore, incentives to accept disadvantages in other domains are

¹² P. Drahos & J. Braithwaite (2002), Information Feudalism: Who Owns the Knowledge Economy?, p. 10.

¹³ Thus e.g. Africa – see ibid., p. 190.

¹⁴ P. Drahos & J. Braithwaite (2002), Information Feudalism: Who Owns the Knowledge Economy?, p. 191.

missing. With that in mind, it is not surprising that no deviation in any direction from the compromise reached was feasible during the last 20 years, and it is very unlikely that Member States will be able to agree on amendments in the foreseeable future.

In this situation, Article 1, paragraph 1, TRIPS plays a crucial role. If unanimous "more extensive protection" may not be achieved, groups of Member States still may agree on a higher standard of protection. From the current perspective, this "country club approach" seems to be less successful than some "driver countries" (in particular the US¹6) initially might have thought. We may recall the political failure of ACTA, which not only suffered from the—as such misguided—strategy to negotiate the whole agreement secretly; that lack of transparency alone suggested an ominous hidden agenda. Beyond that, the drafts were leaked from 2010 on, and this coincided with an increasingly critical public perception of IP protection in general. Although protestors taking to the streets in the tens of thousands might not have understood what exactly they were opposing—one main motivation might have been the feeling that the freedom of the internet was endangered—it obviously made a big impression on politicians, who promptly stepped on the brakes. 18

Today the destiny of the Trans-Pacific Partnership (TPP)—a further proposed trade agreement (also secret, and also leaked, in November 2013) still under negotiation, though not involving the EU¹⁹—is unclear.²⁰ If the publicly available content really corresponds to the current status of negotiation, the range of its TRIPS-plus provisions even exceeds ACTA and some provisions run contrary to the balance of interests,²¹ which explains the fundamental public opposition in the countries concerned. Even if the TPP should fail politically as ACTA did, however, the tendency to seek for ways to push an extension of IP protection beyond the TRIPS standard seems unbroken. Of course one may on principle call into question

¹⁵ P.K. Yu (2011), ACTA and Its Complex Politics, 3 WIPO J. 2011, 1; D. Gervais (2007), Intellectual Property, Trade and Development, Strategies to Optimize Economic Development in a TRIPS Plus Era, Trips and Development, Bilateral Treaties, p. 26.

¹⁶ P. Drahos & J. Braithwaite (2002), Information Feudalism: Who Owns the Knowledge Economy?, pp. 10 et seq., p. 192.

¹⁷ D. Matthews & P. Žikovská (2013), The Rise and Fall of the Anti-Counterfeiting Trade Agreement (ACTA): Lessons for the European Union, 44 IIC 2013, 626.

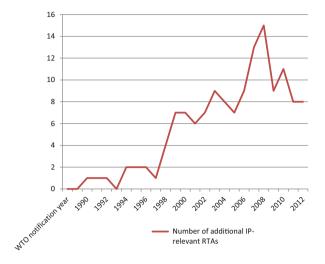
¹⁸ EU Parliament (2014), European Parliament rejects ACTA, press release of 4 July 2012.

¹⁹ Negotiating countries are Australia, Brunei Darussalam, Chile, Canada, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, the United States, and Vietnam, see http://www.ustr.gov/tpp.

²⁰ M. Sutton (2014), The Trans-Pacific Plague: How TPP Spreads the United States' Terrible DRM Policies, Electronic Frontier Foundation of 6 May 2014; see also Office of the USTR (2014), Joint Statement of the Ministers and Heads of Delegation for the Trans-Pacific Partnership Countries, press release of 27 October 2014.

²¹ WikiLeaks Release of Secret Trans-Pacific Partnership Agreement (TPP) – Second Release (available at https://www.wikileaks.org/tpp-ip2/), e.g. by deleting the "Art. 31 TRIPS-saving-provision", in particular Article QQ.E.5 quarter of the leaked draft, contrasting the August 2013 version of the IP Chapter.

Fig. 1 Number of additional IP-relevant regional trade agreements per year (based on a WTO data base, available at http://rtais.wto.org/UI/PublicMaintainRTAHome.aspx)



the impact of specialised agreements that solely focus on IP and involve a limited number of states only. Beyond that, however, we may observe an even more alarming movement: a dramatically increasing number of bilateral or regional free-trade agreements covering a range of topics of varying degrees of interest for the countries involved (see Fig. 1).²²

Based on such a combination of issues, the trade-off mechanism—already "successfully" applied in the WTO negotiations—takes effect again: Concessions with regard to certain trade preferences to the benefit of "weak" countries may leverage IP standards, overrunning the actual need of economically less-developed countries. ²³ Indirectly, such bilateral free-trade agreements set higher IP standards for all members of the WTO since Articles 3 and 4 of TRIPS require equal treatment of all Members, or nationals of those Members, of the WTO. ²⁴

As mentioned before, the freedom to impose "TRIPS plus" standards on other countries according to Article 1, paragraph 1, is not endless, but limited to some extent by counterbalancing provisions.²⁵ Whether or not this sufficiently helps the countries concerned is another question. This question, however, shall not be discussed at this point. What is of interest instead is the impact of the one-way

²² WIPO lists 565 IP-relevant bilateral agreements; WTO lists 585 regional trade agreements, 379 in force, of which more than 100 contain IP provisions; see also H. He (2010), The Development of Free Trade Agreements and International Protection of Intellectual Property Rights in the WTO Era – New Bilateralism and Its Future, 41 IIC 2010, 253.

²³ This concern is addressed in H. Grosse Ruse-Khan et al. (2013), Principles for IP Provisions in Bilateral and Regional Agreements, 44 IIC 2013, 878.

²⁴D. Acquah (2014), Extending the Limits of Protection of Pharmaceutical Patents and Data Outside the EU – Is There a Need to Rebalance?, 45 IIC 2014, 256, 272.

²⁵ See also H. Grosse Ruse-Khan (2012), The Role of TRIPS in a Fragmented IP World, 43 IIC 2012, 881, 882.

system established by Article 1, paragraph 1, TRIPS. Its result is that a reciprocal usage of the "country club approach" is not permitted. Member States that experience negative impacts of a high level of IP protection may not undercut the TRIPS standard independently, nor may groups of countries with similar economic circumstances or comparable interests with a view to their domestic industries agree on a lower level of protection. In particular, combined with the fact that such countries usually are the weaker party in negotiations of bilateral agreements, it is a crucial factor that they are not allowed to conclude "special agreements" in terms of Article 19 PC or Article 20 BC in order to commonly defend their interests.

Seen from that perspective, the WTO setting had—and still has for potential new Member States—the effect of a trap: Preferences regarding the more liberal access to the global market at the time of accession may be stronger than misgivings about unsuitable IP protection standards. Such preferences, however, may wane;²⁸ if domestic industries start burgeoning, giving ground for hope of economic growth. such industries may become more concerned about IP rights enforced by foreign right holders—at least during a transition period. From the perspective of the right holders concerned that of course makes sense. As more recent experiences in countries like India (related to its pharmaceutical industries)—or earlier ones in Germany, the Netherlands or particularly Switzerland (the latest Central European country to introduce patent protection under pressure from France and meanwhile Germany)²⁹—suggest, however, lower protection standards during a certain transitional period tend to facilitate the evolution of a country's own, competitive industrial branches thanks to possible learning effects. We easily may recall that Japan in the 1970s became a heavily denounced imitator of electronic goods (at that time transistor radios, e.g.) and cars; once they closed the gap to the Western industries, Korea followed, and later on Taiwan and meanwhile China—and everyone knows that it is a matter of time until Chinese industries reach the standard of

²⁶ Negotiating countries are Australia, Brunei Darussalam, Chile, Canada, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, the United States, and Vietnam, see http://www.ustr.gov/tpp.

²⁷ For the sake of precision it should be added that groups of countries may agree to apply lower standards of protection, though only to their own nationals; this is of little help to developing countries, where the holders of IP rights are predominantly foreigners.

²⁸ See also H. Grosse Ruse-Khan et al. (2013), Principles for IP Provisions in Bilateral and Regional Agreements, 44 IIC 878, III. Negotiated Outcome, No. 19.

²⁹ P. Kurz (2000), Weltgeschichte des Erfindungsschutzes, Erfinder und Patente im Spiegel der Zeiten, p. 386.

³⁰ See e.g. regarding the Indian pharmaceutical industry: M.S. Mukherjee (2004), The Journey of Indian Patent Law Towards TRIPS Compliance, 35 IIC 2004, 125, 131; M.C. Chagla (1967), Address, in Indian Copyright Office (Ed.), International Copyright. Needs of Developing Countries, pp. 1 et seq.; K. Maskus (2008), Incorporating a Globalized Intellectual Property Rights Regime into an Economic Development Strategy, in K. Maskus (Ed.), Frontiers of Economics and Globalization. Intellectual Property, Growth and Trade, pp. 508 et seq.

US or European developers and producers.³¹ In fact, once this shorter or longer transition period is over, higher protection standards may indeed apply without harm for the strengthened domestic industries, and they often are even requested on the international level. An immediate, unconfined commitment to the TRIPS standards—or even standards beyond TRIPS, based on bilateral or regional free trade agreements—in contrast, risks slowing down the development of domestic industries and thus domestic economic growth.³²

TRIPS does not entirely ignore such concerns; Part VI explicitly states Transitional Arrangements, according to which developing countries (Article 65) and least-developed countries (Article 66) have benefited from delaying the application of certain provisions; some of these terms meanwhile have been extended. To Member States not (or no longer) falling under such provision, however, the trap has already snapped shut: Once it becomes a WTO Member State, a country that was earlier attracted by certain trade preferences cannot avoid the application of the TRIPS standard during transitional periods as well, as mentioned above. The only way out would be to quit the WTO system (including PC and BC) as a whole—with unpredictable economic harm to the domestic economy, including the right holders of that country on the global market. Similar downsides may result from resigning from bilateral or regional agreements (if this is even possible under the applicable agreement); due to their limited geographical scope, however, the consequences of that would hardly be as grave.

³¹ E.g. regarding the development of Japan see T. Morris-Suzuki (1994), The Technological Transformation of Japan – From the Seventeenth to the Twenty-First Century, notably pp. 4 et seq.; see M. Hemmert & C. Oberländer (1998), Technology and Innovation in Japan, pp. 3 et seq.; H. Odagiri, A. Goto & A. Sunami (2010), IPR and the Catch-Up Process in Japan, in H. Odagiri et al. (Eds.), Intellectual Property Rights, Development, and Catch-Up. An International Comparative Study, pp. 95, 113 et seq.; see for China P. Ganea & J. Haijun (2009), China, in P. Goldstein & J. Straus (Eds.), Intellectual Property in Asia. Law, Economics, History and Politics, pp. 17 et seq.; D. Llewelyn (2010), Invisible Gold in Asia. Creating Wealth through Intellectual Property, pp. 285 et seq.

³²G. Grossman & E.L.-C. Lai (2004), International Protection of Intellectual Property, 5 Am. Econ. Rev. 2004, 1635 et seq.; W.G. Park (2008), Intellectual Property Rights and International Innovation, in K.E. Maskus (Ed.), Frontiers of Economics and Globalization. Intellectual Property, Growth and Trade, p. 290; R.L. Ostergard (2014), Economic Growth and Intellectual Property Rights Protection: A Reassessment of the Conventional Wisdom, in D. Gervais (Ed.), Intellectual Property, Trade and Development. Strategies to Optimize Economic Development in a TRIPS Plus Era, p. 40.

³³ Initially the deadline had been extended to 1 July 2013 (see http://www.wto.org/english/news_e/news11_e/trip_17nov11_e.htm). The new deadline is 1 July 2021 (see http://www.wto.org/english/news_e/news13_e/trip_11jun13_e.htm).

³⁴ The principle of national treatment of foreigners (Article 3 of TRIPS) only applies to Member States, whereas nationals of third countries may be discriminated.

3 Concerns of Inappropriate IP Protection

It would be short-sighted to believe that an inappropriate level of IP protection is a concern of less-developed countries only. Although difficult to explain to decision makers, the equation "more patent protection = more innovation" (or "more copyright protection = more creation") is not maintainable; 35 independent of the state of development of a national economy, such beliefs are by far too simplistic. Admittedly, it seems more comprehensible that a lack of legal protection against free riders tends to frustrate investors and thereby to produce what we call "market failure"; it should be noted, however, that market failure is a coin with two sides. The market not only fails to produce desirable results if potential investors are lacking because they anticipate insufficient opportunities for a return on investment; it also fails if independent inventors or creators are unreasonably hindered from further developing pre-existing inventions or creations. The result of that is that neither competing products nor similar (but lower-priced) products may enter the market. More protection than required, therefore, is as detrimental as insufficient protection. Overprotection results so to speak in a "reverse form" of market failure—due to overly prevented competition. 36

If therefore not a maximum of protection, but an appropriate degree of protection is required to actually "contribute to the promotion of technological innovation and to the transfer and dissemination of technology, to the mutual advantage of producers and users of technological knowledge" (Article 7 TRIPS), it goes without saying that this degree may differ in various socio-economic environments. At the same time it should be noted that none of the Member States benefits from what constitutes overprotection under the given circumstances. Instead, every state has an interest in applying appropriate tools for flexibility provided by TRIPS—like e.g. the compulsory licence for improving innovations, Article 31(1). Likewise, exceptions (in terms of Article 30) may be required; one of the most eminent examples is to facilitate research although the required research tools may be patent-protected.³⁷ A further concern is the abuse of rights, e.g. blocking patents

³⁵ For an example of how inappropriate IP protection may prevent the establishment of new business models see the decision of the US-Supreme Court: Am. Broad. Cos. v. Aereo, Inc., 573 U.S. (2014).

³⁶R.M. Hilty & P.R. Slowinski (2014), Patenting Coffee – IP Protection and Its Impact on Innovation in the Coffee-Capsule Market, in K. Purnhagen & P. Rott (Eds.), Varieties of European Economic Law and Regulation. Liber Amicorum for Hans Micklitz, pp. 489 et seq.; e.g. Commission on Intellectual Property Rights (2002), Integrating Intellectual Property Rights and Development Policy, p. 20; F. Claessens (2009), Intellectual Property and Developing Countries. Balancing Rights and Obligations, pp. 598 et seq.

³⁷ E. van Zimmeren & G. van Overwalle (2011), A Paper Tiger? Compulsory License Regimes for Public Health in Europe, 42(1) IIC 2011, 4, 24 et seq.; G. van Overwalle (2006), The Implementation of the Biotechnology Directive in Belgium and its After-Effects. The Introduction of a New Research Exemption and a Compulsory Licence for Public Health, 37 IIC 2006, 889, 909 et seq.

(Article 8, paragraph 2). It is well understood that such tools may be relevant to all Member States, independent of their state of development.

Whereas the mentioned tools to ban undesirable impacts of inappropriate IP protection are in line with TRIPS, it should not be ignored that further remedies may be required—again: independent of the state of development—for which it is less obvious whether or not they are consistent with TRIPS. One example might be that certain states agree that specific fields of technology should be treated differently from others in order to promote innovation in that field, notwithstanding the question whether such difference in treatment constitutes a discrimination as prohibited by Article 27 of TRIPS.³⁸ Other examples coming from copyright law reflect the increasingly required limitations for which Article 13 sets comparatively narrow constraints.³⁹ It would be a misconception to believe that the challenges which copyright law presents to our modern, interconnected society relate to the state of development of national economies. On the contrary: the more developed an economy is, the more it tends to breed innovative business models—and the more such business models run the risk of conflicting with overly protective copyright law.

Having said this, it becomes clear that it is not a concern of only less-developed countries to overcome inappropriate IP protection—and possibly to coordinate legislative activities. If the EU Member States were more ambitious and had a truly forward-looking information-society policy, they obviously might be tempted to limit copyright protection substantially. If they agreed on such an approach, they would constitute a "country club", driven by their belief that less protection provides for more economic growth. Such an approach, however, risks conflicting with Article 1, paragraph 1, of TRIPS. The States might agree on a "more extensive protection" (which they have done in many respects)—but they are not allowed to fall below the minimum protection required by TRIPS. In other words, the trap is of a general nature, and may concern any Member State.

³⁸ For a more liberal approach see Declaration on Patent Protection: Regulatory Sovereignty under TRIPS (Version 1.0 of 15 April 2014), published in 45 IIC 2014, 679, para. 2 (or paras. 6 to 8 of the Considerations).

³⁹ In contrast to the restrictive interpretation of the WTO Dispute Settlement Panel – see Panel Report, United States – Section 110(5) of the US Copyright Act, WT/DS160/R, adopted 27 July 2000, DSR 2000:VIII, p. 3769, para. 6.97 – for a more flexible approach, see Ch. Geiger, J. Griffiths & R. Hilty (2008), Declaration: A Balanced Interpretation of the "Three-Step Test" in Copyright Law, 39 IIC 2008, 707.

4 Ways Out of the Trap

Once we understand that Member States have diverse—but each *per se* defendable—interests regarding the level and scope of IP protection, the question arises whether or not TRIPS provides for certain loopholes to take sufficient account of such justifiable concerns regarding an inappropriate degree of protection.

4.1 Leeway Outside TRIPS

One "solution" might be seen in the possibility of a Member State's responding to perceived overprotection by not, or not fully, enforcing IP rights usually defended by foreign right holders. 40 China, a member of TRIPS since 2001, for quite a while-intentionally or unintentionally-has substantially reduced the effect of TRIPS-conformant legislation by deficient jurisprudence in practice. In the long run, however, this would end up a doubtful strategy if states agree to potentially excessive legal protection, on the one hand, but reduce the effect of this protection by insufficient enforcement of the granted rights, on the other. TRIPS rightly not only focuses on IP protection, but at the same time obliges Member States to provide adequate enforcement measures;⁴¹ it might even be this change of perspective that has brought to light certain imbalances of the IP system (that might not have become visible without adequate enforcement). "Balancing" based on imperfect enforcement, however, will not bring sustainability and consistency to the IP system as a whole. Rather, the scope of IP protection from the outset should be measured so that lawful enforcement of IP rights leads to an adequate consideration of all interests involved.

An alternative would be to confine the impacts of IP protection based on "external" legal instruments which are not addressed, or not restricted, by TRIPS or other regulations within the WTO setting. Although it may be arguable how such practices would be evaluated in the case of a dispute settlement, 42 they at least would not directly conflict with TRIPS provisions—and they might even be backed by TRIPS to some extent. Apart from human rights—which are recognised in some balancing provisions at least between the lines 43 (but hardly are captured in directly applicable national legal provisions)—antitrust law in particular is an explicit concern of TRIPS. 44 The adequate scope of national antitrust legislation, however, is not concretely defined or confined by TRIPS. Member States therefore dispose of

⁴⁰ P. Ganea & J. Haijun (2009), China, in P. Goldstein & J. Straus (Eds.), Intellectual Property in Asia. Law, Economics, History and Politics, pp. 17 et seq.

⁴¹ See Part III of TRIPS, Articles 41 to 62, including criminal sanctions.

⁴² Article 64 TRIPS or Articles XXII and XXIII of GATT (1994).

⁴³ Supra Sect. 1., notably fn. 4.

⁴⁴ E.g. Article 8, para. 2, Article 31(c) and (k), Articles 40 and 41.

substantial leeway to "correct" what they perceive as overprotective IP rights based on their possibly overly extensive, austere national antitrust legislation and practice. Beyond that, nothing much keeps them from applying sector regulations, e.g. access obligations related to certain industries, like telecom, or price regulations (in particular for pharmaceuticals), and by doing so, substantially devaluing the IP rights involved. Whether such legal remedies outside of the WTO setting helps the countries concerned in the long run is one question; the other one is how detrimental such—ultimately protectionist—"countermeasures" against a too extensive degree of IP protection in certain national economies will be for the global trade system as a whole. In other words the question arises whether a sufficiently balanced IP regime—balanced from the perspective of less-developed countries as well—does not lie in the genuine interest of all Member States.

If this seems not (or not sufficiently) to be the case, in particular because the IP protection standard was determined with those countries in mind that have largely developed industries and globally competitive domestic economies, it should be noted that this picture would be incomplete. TRIPS is not silent on this concern: Apart from the stipulated IP rights, it explicitly allows certain confinements of such rights. Although national legislation may not abolish the required IP rights as such, it nevertheless has the possibility to substantially restrict their effects.

Such restrictions of the effect of IP rights may be reached through different legal remedies; at their core, however, all remedies lead to the same impact: The exclusivity that the international law requires as a matter of principle⁴⁵ cannot be exercised to its full extent, but is to some degree reduced. As a consequence, third parties are no longer *a priori* excluded from the use of protected subject matters. Depending on the legal arrangement, such use activities may or may not be monetarily compensated, thus balancing undervalue resulting from the reduction of exclusivity. In case such (adequate) compensation needs to be paid, a legal arrangement carries into effect what is called the "liability regime", ⁴⁶ replacing (or reducing) the "property regime" currently in effect, which is based on full exclusivity.

One way to actualise this liability approach that can be used if particular circumstances apply has its roots in procedural law. It is the denial of injunctive relief, which provides for an easy, time- and cost-efficient balancing tool. It results in the non-enforceability of an IP right although from a substantive point of view the right may be infringed. Concretely, the denial of injunctive relief focuses on cases in which (full) injunction risks harming legitimate interests of the (unauthorised) user of the protected subject matter, whereas legitimate interests

⁴⁵ E.g. Article 9, para. 1 TRIPS in conjunction with Article 8 and 9, paragraph 1 BC: "shall have the exclusive right"; Article 6, paragraph 1, and Article 7, para. 1 WCT (copyright); Article 16, para. 1 TRIPS (trademarks); Article 28, para. 1 TRIPS (patents).

⁴⁶ Fundamental for this approach G. Calabresi & A.D. Melamed (1972), Property Rules, Liability Rules, and Inalienability – One View of the Cathedral, 85 Harv. L. Rev. 1972, 1089; most recently with further references D. Krauspenhaar (2015), Liability Regime in Patent Law. A Legal and Economic Analysis.

of the right holder would not outweigh that harm; in such cases, an unlimited injunctive relief might overshoot the mark. This may occur, for example, if the use in question does not cause any disadvantage to the right holder. Of course, as a matter of principle, the right holder does not need to justify why he wants his IP rights to be fully enforced—whether or not the injunctive relief objectively meets his interests. Therefore, the fundamental premise for the denial of an injunctive relief derives from the requirement that an IP right is used abusively, or that the conduct of the right holder constitutes an abuse—whatever that means in practice. It is no coincidence that this legal tool was developed in the common-law system, where the judges dispose of sufficient flexibilities to balance the interests involved in a particular case—flexibilities deriving from considerations of "equity", with which to "correct" a detected inadequacy of (written) law, Based on that matrix, the US case law has developed comparatively concrete rules. Notably confirmed by the famous *eBay v. MercExchange* case, ⁴⁷ the US jurisdiction has designed a tool (the "four-factor test") to recalibrate the patent system so as to achieve an appropriate equilibrium. According to that jurisdiction, it has to be taken into account (1) whether a plaintiff in case of non-injunction would face irreparable injury, (2) whether an alternative adequate remedy (such as damages) can meet the plaintiff's concern, (3) whether the injunction lies in the public interest and (4) which party in view of a balance of harms should be favoured.

Although it is worth mentioning that the denial of injunctive relief is not explicitly addressed in TRIPS, ⁴⁸ a number of balancing provisions back its implementation and justify its limiting effect on exclusive IP rights. In particular, Article 8, paragraph 2 recognises the need for appropriate measures "to prevent the abuse of intellectual property rights by right holders". Beyond that, according to Article 41, paragraph 1, enforcement procedures "shall be applied in such a manner as to ... provide for safeguards against their abuse. Likewise, Article 48, paragraph 1, allows the judicial authorities "to order a party at whose request measures were taken and who has abused enforcement procedures to provide to a party wrongfully enjoined or restrained adequate compensation for the injury suffered because of such abuse. The judicial authorities shall also have the authority to order the

⁴⁷ eBay, Inc. v. MercExchange, L.L.C., 547 U.S. 388 (2006). In 2007 the District Court, E.D. Virginia, to which the case returned, finally denied the injunctive relief, 500 F. Supp. 2d 556 (2007). More about this case and its impacts: E. Elrefaie (2010), Injunctive Relief Post eBay and the Various Applications of the Four-Factor Test in Differing Technological Industries, 2 Hastings Sci. & Tech. L.J. 2010, 219, 221 et seq.; J. Phillips (2009), eBay's Effect on Copyright Injunctions: When Property Rules Give Way to Liability Rules, 24 Berkeley Tech. L.J. 2009, 405, 416 et seq.; B. Petersen (2008), Injunctive Relief in the Post-eBay World, 23 Berkeley Tech. L.J. 2008, 193; M. Trimble (2012), Injunctive Relief, Equity, and Misuse of Rights in U.S. Patent Law, GRUR Int. 2012, 514, 518 et seq.; L. O'Melinn (2008), Effects of eBay: Discretion, Statutory Damages, and Private Attorneys-General, 2 Akron Intell. Prop. J. 2008, 119; see from the civil law perspective also A. Ohly (2008), "Patenttrolle" oder: Der patentrechtliche Unterlassungsanspruch unter Verhältnismäßigkeitsvorbehalt? Aktuelle Entwicklung im US-Patentrecht und ihre Bedeutung für das deutsche und europäische Patentsystem, GRUR Int. 2008, 787, 789 et seq.

⁴⁸ Article 44, para. 2, relates to compulsory licensing according to Article 31 only.

applicant to pay the defendant expenses, which may include appropriate attorney's fees". Similar aims are pursued by Article 50, paragraph 3, and Article 53, paragraph 1. Nonetheless, civil law judges may find it difficult to apply that balancing tool because they do not dispose of sufficient flexibilities to balance the interests involved in a particular case—which ultimately might lead to the need to establish according procedural rules.⁴⁹

4.2 Leeway Within TRIPS

But IP legislation itself may also reduce exclusivity by constraining the scope of IP rights. The legal instruments to implement such constraints to some extent are suggested by TRIPS. Basically two alternatives may be implemented by national legislation:

- Either certain specific use activities of protected subject matters by third parties
 are defined and directly permitted by law without consent of the right holder; this
 may happen based on precise legal provisions—as can frequently be found in
 civil law systems—or based on jurisdictions specifying rather general legal
 provisions (like in particular fair-use clauses, primarily applied in commonlaw systems).
- Or legislation only defines requirements under which permission for use activities of protected subject matters by third parties is obtainable, though without directly permitting them. Rather, a third party complying with those legal requirements may approach the right holder and require a licence; in case of lacking consent, the third party has the right to sue for the grant of a licence.

Both alternatives should be distinguished terminologically because their impacts are quite different. This may not be so easy in view of the literature, where the two most frequently used terms—statutory licence and compulsory licence—are used for both. From a linguistic point of view, however, the following distinction suggests itself:

• The term "statutory" licences should be used for use permissions directly available under a "statute" only. More common for such legal settings—but

⁴⁹ R.M. Hilty (2015), Legal Remedies against Abuse, Misuse, and Other Forms of Inappropriate Conduct of IP Right Holders, in R.M. Hilty & K.-C. Liu (2015), Compulsory Licensing. Practical Experiences and Ways Forward, pp. 377–395.

⁵⁰ E.g. P.B. Hugenholtz & R.L. Okediji (2009), Contours of an International Instrument on Limitations and Exceptions, in N.N. Weinstock (Ed.), The Development Agenda. Global Intellectual Property and Developing Countries, pp. 473 et seq.; A. Kur & M. Levin (2011), Intellectual Property Rights in a Fair World Trade System, pp. 455 et seq.

legally not meaningful—are terms like "exceptions" and "limitations".⁵¹ These terms, however, describe the factual impact of such provisions (namely, a certain reduction of the otherwise full exclusivity) rather than their legal design: the *licentia* (the Latin term for "freedom", "permission") by law.

• "Compulsory", in contrast, only correctly describes situations in which the right holder may not refuse the grant of a licence—be it based on the IP legislation in question or on antitrust law, for instance. Even if a right holder does not "grant" the licence himself, the judgement of a court leads to a comparable effect, substituting for his consent.

The compulsory licence is a perfect setting in which to implement the "liability regime". 52 This is reflected by Article 31(h) TRIPS, according to which "the right holder shall be paid adequate remuneration in the circumstances of each case, taking into account the economic value of the authorization". This provision applies to patent law only, which does not exclude an application of the compulsory licence in the field of copyright law, however. If Part II, Section 1 (dealing with copyright law and related rights) is silent about the compulsory licence, this stands in contrast to its explicit exclusion with respect to trademark law in Article 21. Beyond that, the implicitly suggested *conclusio e contrario* in favour of the compulsory licence in copyright law needs to be read in the light of the Berne Convention as well. Article 13, paragraph 1, BC explicitly deals with the compulsory licence, but is limited to "reservations and conditions on the exclusive right granted to the author of a musical work and to the author of any words, the recording of which together with the musical work has already been authorized by the latter, to authorize the sound recording of that musical work, together with such words, if any; ...". This reference to this one particular field, however, should not be interpreted as a restriction of the applicability of the compulsory licence in copyright law.⁵³

On the one hand, history suggests another reading. This provision was introduced during the Berlin Conference in 1908 already—at a time when sound

⁵¹ See Article 13 TRIPS, however, dealing with copyright law only, whereas Article 17, Article 26, para. 2, and Article 30 TRIPS (related to trademarks, industrial design and patents) solely mention (limited) "exceptions" to exclusive rights. The delimitation of exceptions and limitations in copyright law is unclear and disputed in the literature: C. Geiger (2009), Implementing an International Instrument for Interpreting Copyright Limitations and Exceptions, 40 IIC 2009, 627; M. Leistner (2011), The German Federal Supreme Court's Judgment on Google's Image Search – A Topical Example of the "Limitations" of the European Approach to Exceptions and Limitations, 42 IIC 2011, 418; see on the problematic terminology also e.g. H. He (2009), Seeking a Balanced Interpretation of the Three-Step Test – An Adjusted Structure in View of Divergent Approaches, 40(3) IIC 2009, 274. The author uses the term "limitations" generally for limitations and exceptions, see ibid., fn. 1.

⁵² See on the positive effect for competition and prices e.g. S. Mukherjee (2004), The Journey of Indian Patent Law Towards TRIPS Compliance, 35 IIC 2004, 125, 149; see generally the collection of articles in R.M. Hilty & K.-C. Liu (2015), Compulsory Licensing. Practical Experiences and Ways Forward.

⁵³ See also Article 11^{bis}, para. 1 BC, regarding broadcasting and related rights; at least according to the title, those rights likewise may be subject to "compulsory licenses".

recordings were the only existing technology to (technically) reproduce the fixation of a work apart from letterpress printing. At that time, compulsory licences had already been applied, particularly in the USA, related to music recordings as well (based on an explicit provision in the Copyright Act, ⁵⁴ but also—and even earlier related to printed books not available in sufficient quantity and at reasonable prices. 55 Whereas the USA were not bound by the BC at that time, the Netherlands became a member on 1 November 1912; in 1972 they introduced Article 17 in their Copyright Act (1912) allowing for the copying of scientific literature. ⁵⁶ In all these cases—including the establishment of Article 13 BC during the Berlin Conference in 1908—antitrust concerns explicitly were put forward.⁵⁷ Such concerns were brought up again during the Conferences in Rome (1928) and Brussels (1948) in the latter case related to collecting societies, although still during a period of time when modern antitrust law was not yet established.⁵⁸ Against that background the British delegation drafted a Declaration during the Brussels Conference reserving the right to take measures against anticompetitive behaviour.⁵⁹ Ultimately this Declaration was not adopted, however, because it was undisputed that the BC did not limit the Member State's freedom to take measures against monopolisation and excessive prices, in particular through the establishment of compulsory licensing.⁶⁰

On the other hand it should be noted that compulsory licensing impacts the market position of the right holder to a minor degree compared to statutory licences, which are generally permitted under the conditions of Article 13 TRIPS. Not only is it up to the right holder's own discretion whether or not to supply sufficient copies of a copyright-protected work to meet market demand and for reasonable prices—thereby avoiding the grant of a compulsory licence. Beyond that, as a rule one single granted compulsory licence sufficiently countervails antitrust situations. Once it is granted, the right holder remains in a position to negotiate reasonable

⁵⁴ Ch. 1. § 1 (e) US Copyright Act (1906), see R.S. Lee (1982), An Economic Analysis of Compulsory Licensing in Copyright Law, 5 W. New Eng. L. Rev. 1982, 205 et seq.

⁵⁵ For further details Th. Solberg (1906), Copyright Enactments of the United States (1783–1906), pp. 11 et seq.; see also R.M. Hilty (2009), Renaissance der Zwangslizenzen im Urheberrecht? Gedanken zu Ungereimtheiten auf der urheberrechtlichen Wertschöpfungskette, 111 GRUR 2009, 633 et seq.

⁵⁶ P. Demaret (1987), Industrial Property Rights, Compulsory Licences and the Free Movement of Goods under Community Law, 18 IIC 1987, 161, 168, fn. 31.

⁵⁷ See Actes de la Conférence réunie à Berlin du 14 Octobre au 14 Novembre 1908 avec les Actes de Ratification, Berne: Bureau de l'Union Internationale Littéraire et Artistiques, 1910, pp. 260, 261.

⁵⁸ Actes de la Conférence réunie à Rome du 7 mai au 2 juin 1928, Berne, Bureau de l'Union Internationale pour la Protection des Oeuvres Littéraires et Artistiques, 1929, pp. 256 et seqq.; Documents de la Conférence réunie à Bruxelles du 5 au 26 juin 1948, Berne, Bureau de l'Union Internationale pour la Protection des Oeuvres Littéraires et Artistiques, 1951, p. 264.

⁵⁹ Documents de la Conférence réunie à Bruxelles du 5 au 26 juin 1948, Berne, Bureau de l'Union Internationale pour la Protection des Oeuvres Littéraires et Artistiques, 1951, p. 82.

⁶⁰ S. Ricketson & J. Ginsburg (2006), International Copyright and Neighbouring Rights: The Berne Convention and Beyond, pp. 844–847.

terms and conditions. In fact, what Article 13, paragraph 1, BC stipulates for compulsory licences related to sound recordings—namely that it "shall not, in any circumstances, be prejudicial to the rights of these authors to obtain equitable remuneration which, in the absence of agreement, shall be fixed by competent authority"—is mirrored in Article 31(h) TRIPS for patent law; adequate compensation therefore may be deemed a common prerequisite for the grant of a compulsory licence.

Statutory licences, by contrast, may or may not be compensated. Compensation mechanisms, if they apply, however, are much more complex to establish than the required adequate remuneration for compulsory licences. The reason for this is that the parties involved—the right holder on the one hand and the (usually indeterminate number of) users relying on statutory permission on the other—typically do not become acquainted with each other. Payments therefore require the involvement of intermediaries. Such intermediaries are common in the field of copyright law. Increasingly faced with use activities by unauthorised parties based on copies of works (at an early stage vinyl recordings used by broadcasting stations, e.g.; later on tapes and CDs used for reproduction purposes; meanwhile any kind of digital storage systems allowing for various use activities), the right holders had to organise themselves. Collecting societies have become the most common form of self-help organisations. In patent law, the situation is different because mass uses like those related to copyright-protected works mentioned above are rather unusual. Instead, particular situations may require a statutory licence, such as the use of an invention for research or teaching purposes, or possibly for repair products involving a patented invention and the like. In many cases, however, such uses do not harm the right holder, which is why there is no need for compensation.

All these variations of confining the scope of IP rights as a matter of principle are generally permitted by TRIPS. The picture painted, however, is neither complete nor very distinct. This blurring has advantages and disadvantages. The upside is that TRIPS leaves remarkable room for interpretation from which national legislators and courts may benefit when considering the actual needs of their own country in view of its socio-economic conditions.

The downside is that there is no legal certainty with regard to the absolute limits stipulated by TRIPS. Nevertheless, a rather specific category of provisions—the so-called three-step test, retained for all important IP rights in TRIPS⁶¹ and further treaties⁶² in different variations—suggests that confining the scope of IP rights is not admissible without restrictions. A precise demarcation, however, is not possible. This makes TRIPS vulnerable to legal policy, and it's not surprising that interpretations diverge widely, at least regarding certain questions, including in particular the impact of the three-step test, but also beyond.

⁶¹ Articles 13, 17, 26, para. 2, and 30.

⁶² In particular Article 9, para. 2 BC, Article 10 para. 1, 2 WCT, Art. 16, para. 2 WPPT.

5 Justifying the Maximum Use of Flexibility Under TRIPS

To provide answers to alleviate this uncertainty and unpredictability was the purpose of initiatives of two expert groups—one related to copyright law, the other to patent law. The outcome of each expert group was one Declaration⁶³ that filled a number of gaps by explaining the range of flexibility embedded in TRIPS and other treaties, in particular, the Paris and the Berne Convention. The purpose of these Declarations is not to issue any orders to national legislators or courts, but to show which legal arrangements are in line with the international law. Most importantly, the Declarations presume that international legislation does not need to be applied by all Member States in the same way. Rather, the Declarations stress the necessity to differentiate according to varying socio-economic conditions.

At this point the two Declarations shall not be explicated in detail. Rather, it seems to be important to justify their chosen approach. In fact, at first view it might seem that the suggested interpretations of the international law favour certain groups of countries only, namely, the less-developed ones, at the risk of disadvantaging the industrialised world in contrast. This perception, however, would be imprecise and misleading.

It would be short-sighted to believe that unconfined exclusivity of IP rights could not harm Western economies as well. The opposite is true, as has been suggested above already: ⁶⁴ The challenges to the patent system caused by certain types of conduct by right holders, particularly in the most industrialised countries, are hardly disputable anymore today. The tens of thousands of patents in each smart phone, for instance, by no means have the purpose to protect right holders against free riders; rather they serve their producers as weapons in the smart phone wars against each other. The larger the thickets of IP patents become, the more likely it is that any competitor will unavoidably infringe an indefinite number of such patents. Disposing of one's own patents—which likewise may be claimed to be infringed—therefore is a prerequisite for surviving in such wars. ⁶⁵ It goes without saying that the costs of such wars are tremendous—and that those costs ultimately are paid by the consumers. Another field of discontent involves evergreening patents, nota-

⁶³ Ch. Geiger, J. Griffiths & R. Hilty (2008), Declaration: A Balanced Interpretation of the "Three-Step Test" in Copyright Law, 39 IIC 2008, 707; Declaration on Patent Protection: Regulatory Sovereignty under TRIPS (Version 1.0 of 15 April 2014), published in 45 IIC 2014, 679.

⁶⁴ Supra 3.

⁶⁵ M. Jones (2014), Application for Central Amendment of a Patent after Revocation at First-Instance does not of itself Render an Appeal an Abuse of Process, 63 GRUR Int. 2014, 632; J. Lowenson (2014), Round Two: Apple and Samsung Suit Up for another Billion Dollar Patent War, The Verge press release of 31 March 2014; but see also The Guardian (2014), Apple and Samsung Agree to Drop Patent Lawsuits Outside US, press release of 6 August 2014; H. Jin & D. Levine (2014), Samsung Electronics, Apple Call End to Patents War Outside the U.S., REUTERS press release of 6 August 2014.

bly—but not exclusively—in the pharmaceutical industries. 66 Although there are other strategies to block the market entrance of generic drugs (like pay-for-delay agreements⁶⁷), it is obvious that the (indirect) extensions of the term of protection beyond the intended expiration of the patent actualised by these strategies implies dysfunctional effects in terms of the aforementioned "reverse forms" of market failure. 68 On the other hand, copyright law provides for a number of examples of doubtful suppressions of new business models. It is hardly disputed today, for example, that the music industry delayed the breakthrough of (legal) online portals for almost one decade by—ultimately abortive—attempts to force consumers to buy compact discs or other data carriers; countless law suits against illegal suppliers devour sums of money which could have been invested sensibly in future technologies. Currently, it might be copyright law again that prohibits the breakthrough of e-books—at least in Europe, where we observe a comparatively very low market penetration, hand in hand with multiple prices compared to the US market.⁶⁹ Like in the case of the controversial Google book-scanning project, 70 the problem is not the—under the current legal situation unlawful—activity of a third party (any independent supplier of new business models). On the contrary: advancement requires new ways of providing legally protected content. The problem is that right holders—who are not willing or not in the position to supply such business models themselves—may prevent such activities without any need for justification.

Generally it should be borne in mind that IP rights were initially established, and are granted today, in order to fulfil certain functions. It would be simplistic to understand exclusive rights as an individual property title only.⁷¹ Their very purpose is to substantiate certain regulatory policies in an environment of

⁶⁶ C. Correa (2012), Efforts to Raise the Bar in Patent Examination Need to Be Supported, 43 IIC 2012, 747; Supreme Court of India, Novartis v. Union of India & Others, Civil Appeals No. 2706–2716 of 2013.

⁶⁷ Instead of all see recently e.g. European Commission (2013), 4th Report on the Monitoring of Patent Settlements, pp. 6 et seqq., p. 10; see also G. Gürkaynak, A. Güner & J. Filson (2014), The Global Reach of FTC v. Actavis – Will Europe Differ from the US Approach to Pay-for-Delay Agreements?, 45 IIC 2014, 128 et seq.

⁶⁸ Supra 3.

⁶⁹ See for a comparison of the situation in various countries R. Wischenbart (2014), Content & Consulting, The Global eBook Report.

⁷⁰ See e.g. K. Pappalardo (2010), Google Book Search Settlement: Implications for Australia, notably pp. 5 et seqq.; P. Samuelson (2009), Legally Speaking: The Dead Souls of the Google Book Search Settlement, Berkeley – School of Law Public Law Research Paper No. 1387782 of 16 April 2009, pp. 28–30; see also the class action lawsuit Authors Guild, Inc. v. Google Inc., 721 F.3d 132, 134 (2d Cir. 2013). This case was heralded by many copyright professionals as "the most important fair use case of the 21st century" (P. Samuelson (2009), Legally Speaking: The Dead Souls of the Google Book Search Settlement, Berkeley – School of Law Public Law Research Paper No. 1387782 of 16 April 2009, p. 28); see also J. Stempel (2013), Google Defeats Authors in U.S. Book-Scanning Lawsuit, REUTERS press release of 14 November 2013.

⁷¹ Despite the fact that the Preamble of TRIPS recognises intellectual property rights as "private rights".

competition, thereby enhancing general welfare. Although most of the IP rights that are actually granted are supposed to achieve the intended functions to a large degree—in particular, to secure investments in innovation, creation, marketing efforts and the like and thus to avoid market failures in terms of undue misappropriations by competitors⁷²—we should not ignore those cases in which the granted exclusivity is cast in dysfunctional forms. Even if those cases may be a clear minority, they can harm certain market participants awfully, their dysfunctions interfering with workable competition and ultimately harming general interests in various forms.

Having that in mind, we should be aware that legal instruments to limit such dysfunctional conduct are not immanent to the right holders from the outset; they do not apply automatically. Neither will an injunctive relief be denied without seriously considering the grounds; nor will a compulsory licence be granted without reflection simply because the possibility is established by law. Likewise, a national legislature would be well advised to keep the necessity of legal certainty for investors in mind and therefore to weigh the pros and cons of establishing statutory licences. But such instruments are needed in certain cases—and they may have disciplining impacts by force of their mere existence.

Of course one may argue that legislators and courts in industrialised countries are indeed in the position of balancing all interests involved, whereas those of developing countries solely focus on their domestic interests. This is certainly true—as the same was true of the initiators of TRIPS, who carefully designed the international regime to require comparatively high IP standards in the Member States in the form of a one-way setting. When imposing these standards they hardly had the interests of less-developed countries in mind; rather, they made use of the package approach of the WTO to seduce certain countries into trade-offs⁷³—to the advantage of the Western industries.

Such strategies are understandable because any country primarily focuses on its own interests. Beyond that, it was reasonably forward-looking to establish an international legal framework in an era in which the implications of globalisation were just about to emerge. Ultimately TRIPS should also not be seen as a further step beyond previous IP treaties only, in particular the BC or the PC. Rather—nomen est omen—it constitutes one important component of the complex legal framework of global trade regulation. In the light of that, TRIPS is not a bad outcome—on the contrary, it provides for a remarkable degree of flexibility, which is inevitable considering the diverse standpoints of all parties involved. Thus TRIPS proves to be relatively balanced—maybe too balanced from the perspective of those countries who meanwhile try to restrict those flexibilities by means of bilateral or regional agreements. If less-developed countries thus deprive themselves of the opportunity to take advantage of the openness of TRIPS, it is one

⁷² See supra Sect. 3.

⁷³ See supra Sect. 1.

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thing. It would be another matter altogether, however, to generally undermine the equilibrium established by TRIPS.

In that respect it should further be recalled that harmonisation of national laws including aspects of intellectual property rights—may not be understood as an aim in itself. It is doubtless of advantage for globally acting market participants to dispose of sufficient legal certainty in every country of relevance for their businesses; IP right holders therefore have an obvious interest in encountering a certain standard of protection all over the world—as is provided for by a number of international treaties and carried forward by TRIPS. TRIPS, however, needs to be seen from a broader perspective. It is not limited to the one-sided view of right holders, but explicitly pursues much more comprehensive objectives. If "intellectual property rights should contribute to the promotion of technological innovation and to the transfer and dissemination of technology, to the mutual advantage of producers and users of technological knowledge and in a manner conducive to social and economic welfare, and to a balance of rights and obligations" (Article 7), the argument of legal certainty also applies to those market participants who invest in business models without owning their own IP rights, but who nevertheless need predictability regarding permitted use activities. This other perspective advocates a harmonisation of the limits of IP protection as well—but interestingly it never has been a serious concern of international law. ⁷⁴ In arguing that legal harmonisation is a concern of general interests, there is therefore the risk of being hypocritical if this argument focuses on one side of the coin only: that of the right holders.

Apart from that a question of principle must be allowed: Can it in the long run remain the aim and sole purpose of a World Trade Organisation—whose focus is on the sustainable development of the community of states—to actualise an alignment of the substantial laws of the Member States only? Should not the overarching aim instead be to work towards a global society with comparable standards of living? If we really want developing countries to become developed countries one day, is it realistic to believe that we will achieve this aim based on concurrent legislations—or even worse: Do legislations that prove to be efficient in developed countries not rather produce the opposite outcome during the unavoidable period of time in which less-developed countries should become independent and their economies should emerge?

If the intention phrased in Article 8, paragraph 1, TRIPS—namely, not to interfere with the freedom of Member States to promote the public interest in sectors of vital importance to their socio-economic and technological

⁷⁴ Solely in copyright law, Article 10, para. 1, BC established what for decades was the only mandatory limitation, which is related to the quotation right. Only very recently, on 28 June 2013, did 51 WIPO Member States sign the Marrakesh Treaty to Facilitate Access to Published Works by Visually Impaired Persons and Persons with Print Disabilities, which is to introduce certain further – mandatory – exceptions, subject to the ratification of the Treaty by each Member State, however. To enter into force, 20 ratifications are required; India has been the first country to ratify the Treaty by 24 June 2014 (for further ratifications see www.wipo.int/treaties/en/ShowResults.jsp?treaty_id=843).

development—is taken seriously, and since this provision does not per se provide for an upper margin of protection, ⁷⁵ this provision needs to be understood to allow the pursuit of goals that lie in the domestic interest only, be those goals in line with interests of other countries or not. Only such a very liberal approach adequately mitigates the consequences of the trap that the WTO setting ultimately constitutes to Member States.

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References

- Acquah, D. (2014), Extending the Limits of Protection of Pharmaceutical Patents and Data Outside the EU Is There a Need to Rebalance?, 45 IIC 2014, 256, Munich/Berlin: C.H. Beck/Springer
- Calabresi, G. & Melamed, A.D. (1972), Property Rules, Liability Rules, and Inalienability One View of the Cathedral, 85 Harv. L. Rev. 1972, 1089, Cambridge: Harvard University School of Law
- Chagla, M.C. (1967), Address, in Indian Copyright Office (Ed.), International Copyright. Needs of Developing Countries, New Delhi: Ministry of Education
- Ch. Geiger, J. Griffiths & R. Hilty (2008), Declaration: A Balanced Interpretation of the "Three-Step Test" in Copyright Law, 39 IIC 2008, 707, available at: http://www.ip.mpg.de/en/news/declaration_on_the_three_step_test.html (accessed 20 May 2015)
- Claessens, F. (2009), Intellectual Property and Developing Countries. Balancing Rights and Obligations, Nijmegen: Wolf Legal Publishers
- Commission on Intellectual Property Rights (2002), Integrating Intellectual Property Rights and Development Policy, available at www.pircommission.org/papers/pdfs/final_report/ciprfullfinal.pdf (accessed 20 May 2015)
- Correa, C. (2012), Efforts to Raise the Bar in Patent Examination Need to Be Supported, 43 IIC 2012, 747, Munich/Berlin: C.H. Beck/Springer
- Declaration on Patent Protection: Regulatory Sovereignty under TRIPS (Version 1.0 of 15 April 2014), published in 45 IIC 2014, 679, available at: http://www.ip.mpg.de/en/news/declaration_on_patent_protection.html (accessed 20 May 2015)
- Demaret, P. (1987), Industrial Property Rights, Compulsory Licences and the Free Movement of Goods under Community Law, 18 IIC 1987, 161, Munich/Berlin: C.H. Beck/Springer
- Drahos, P. & Braithwaite, J. (2002), Information Feudalism: Who Owns the Knowledge Economy?, London: Earthscan
- Electronic Frontier Foundation (2014), The Trans-Pacific Plague: How TPP Spreads the United States' Terrible DRM Policies, available at https://www.eff.org/deeplinks/2014/05/transpacific-plague (accessed 20 May 2015)
- Elrefaie, E. (2010), Injunctive Relief Post eBay and the Various Applications of the Four-Factor Test in Differing Technological Industries. 2 Hastings Sci. & Tech. L.J. 2010, 219, San Francisco: UC Hastings College of the Law
- EU Parliament (2012), European Parliament Rejects ACTA, press release of 4 July 2012, available at http://www.europarl.europa.eu/news/en/news-room/content/20120703IPR48247/ html/European-Parliament-rejects-ACTA (accessed 20 May 2015)

⁷⁵ Supra 1.

- European Commission (2013), 4th Report on the Monitoring of Patent Settlements, available at: http://ec.europa.eu/competition/sectors/pharmaceuticals/inquiry/patent_settlements_report4_ en.pdf (accessed 20 May 2015)
- Ganea, P. & Haijun, J. (2009), China, in P. Goldstein & J. Straus (Eds.), Intellectual Property in Asia; Law, Economics, History and Politics, MPI Studies on Intellectual Property, Competition and Tax Law. Vol. 9, Heidelberg: Springer
- Geiger, C. (2009), Implementing an International Instrument for Interpreting Copyright Limitations and Exceptions, 40 IIC 2009, 627–642, Munich/Berlin: C.H. Beck/Springer
- Geiger, C., Griffiths, J. & Hilty, R.M. (2008), Declaration on a Balanced Interpretation of the "Three-Step Test" in Copyright Law, 39 IIC 2008, 707, Munich/Berlin: C.H. Beck/Springer
- Gervais, D. (2007), Intellectual Property, Trade and Development, Strategies to Optimize Economic Development in a TRIPS Plus Era, Trips and Development, Bilateral Treaties, Oxford: Oxford University Press
- Grosse Ruse Khan, H. (2012), The Role of TRIPS in a Fragmented IP World, 43 IIC 2012, 881, Munich/Berlin: C.H. Beck/Springer
- Grossman, G. & Lai E.L.-C. (2004), International Protection of Intellectual Property, 5 Am. Econ. Rev. 2004, 1635, Pittsburgh: American Economic Association
- Gürkaynak, G., Güner, A. & Filson, J. (2014), The Global Reach of FTC v. Actavis Will Europe Differ from the US Approach to Pay-for-Delay Agreements?, 45 IIC 2014, 128, Munich/Berlin: C.H. Beck/Springer
- He, H. (2009), Seeking a Balanced Interpretation of the Three-Step Test An Adjusted Structure in View of Divergent Approaches, 40 IIC 2009, 274, Munich/Berlin: C.H. Beck/Springer
- He, H. (2010), The Development of Free Trade Agreements and International Protection of Intellectual Property Rights in the WTO Era – New Bilateralism and Its Future, 41 IIC 2010, 253, Munich/Berlin: C.H. Beck/Springer
- Hemmert, M. & Oberländer, C. (1998), Technology and Innovation in Japan, London: Routledge
 Hilty, R.M. (2015), Legal Remedies against Abuse, Misuse, and Other Forms of Inappropriate
 Conduct of IP Right Holders, in R.M. Hilty & K.-C. Liu (Eds.), Compulsory Licensing.
 Practical Experiences and Ways Forward. MPI Studies on Intellectual Property and Competition Law, p. 377. Vol. 22, Heidelberg: Springer
- Hilty, R.M. & Liu, K.-C. (2015), Compulsory Licensing. Practical Experiences and Ways Forward. MPI Studies on Intellectual Property and Competition Law. Vol. 22, Heidelberg: Springer
- Hilty, R.M. (2009), Renaissance der Zwangslizenzen im Urheberrecht? Gedanken zu Ungereimtheiten auf der urheberrechtlichen Wertschöpfungskette, 111 GRUR 2009, 633, Munich: C.H. Beck
- Hilty, R.M. & Slowinski, P.R. (2014), Patenting Coffee IP Protection and Its Impact on Innovation in the Coffee-Capsule Market, in K. Purnhagen & P. Rott (Eds.), Varieties of European Economic Law and Regulation. Liber Amicorum for Hans Micklitz (Studies in European Economic Law and Regulation, Vol. 3), p. 489, Heidelberg: Springer
- Ho, C.M. (2011), An Overview of 'TRIPS-plus' Standards, Loyola University Chicago School of Law Public Law & Legal Theory Research Paper No. 33, p. 251
- Hugenholtz, P.B. & Okediji, R.L. (2009), Contours of an International Instrument on Limitations and Exceptions, in N.N. Weinstock (Ed.), The Development Agenda. Global Intellectual Property and Developing Countries, Oxford: Oxford University Press
- H. Grosse Ruse-Khan et al. (2013), Principles for Intellectual Property Provisions in Bilateral and Regional Agreements, 44 IIC 2013, 878. Munich/Berlin: C.H. Beck/Springer
- H. Jin & D. Levine (2014), Samsung Electronics, Apple Call End to Patents War Outside the U.S., REUTERS press release of 6 August 2014, available at: http://www.reuters.com/article/2014/ 08/06/us-samsung-elec-apple-idUSKBN0G605920140806 (accessed 20 May 2015)
- Jones, M. (2014), Application for Central Amendment of a Patent after Revocation at First-Instance does not of itself render an Appeal an Abuse of Process, 63 GRUR Int. 2014, 632, Munich: C.H. Beck

- Krauspenhaar, D. (2015), Liability Regime in Patent Law. A Legal and Economic Analysis, Berlin: Springer
- Kur, A. & Levin, M. (2011), Intellectual Property Rights in a Fair World Trade System, Cheltenham: Edward Elgar
- Kurz, P. (2000), Weltgeschichte des Erfindungsschutzes, Erfinder und Patente im Spiegel der Zeiten, Köln: Carl Heymanns Verlag
- Lamping, M. (2014), Declaration on Patent Protection Regulatory Sovereignty under TRIPS, 45 IIC 2014, 679, Munich/Berlin: C.H. Beck/Springer
- Lee, R.S. (1982), An Economic Analysis of Compulsory Licensing in Copyright Law, 5 W. New Eng. L. Rev. 1982, 203, Springfield: Western New England University
- Leistner, M. (2011), The German Federal Supreme Court's Judgment on Google's Image Search A Topical Example of the "Limitations" of the European Approach to Exceptions and Limitations, 42 IIC 2011, 418, Munich/Berlin: C.H. Beck/Springer
- Llewelyn, D. (2010), Invisible Gold in Asia. Creating Wealth through Intellectual Property, Singapore: Marshall Cavendish Business
- Maskus, K. (2008), Incorporating a Globalized Intellectual Property Rights Regime into an Economic Development Strategy, in K. Maskus (Ed.), Frontiers of Economics and Globalization. Intellectual Property, Growth and Trade, Amsterdam: Elsevier
- Matthews, D. & Žikovská, P. (2013), The Rise and Fall of the Anti-Counterfeiting Trade Agreement (ACTA): Lessons for the European Union, 44 IIC 2013, 626, Munich/Berlin: C.H. Beck/Springer
- Morris-Suzuki, T. (1994), The Technological Transformation of Japan From the Seventeenth to the Twenty-first Century, Cambridge: Cambridge University Press
- Mukherjee, S. (2004), The Journey of Indian Patent Law Towards TRIPS Compliance, 35 IIC 2004, 125, Munich/Berlin: C.H. Beck/Springer
- O'Melinn, L. (2008), Effects of eBay: Discretion, Statutory Damages, and Private Attorneys-General, 2 Akron Intell. Prop. J. 2008, 119, Akron: The University of Akron School of Law
- Odagiri, H., Goto, A. & Sunami, A. (2010), IPR and the Catch-Up Process in Japan, in H. Odagiri, A. Goto, A. Sunami & R.R. Nelson (Eds.), Intellectual Property Rights, Development, and Catch-Up. An International Comparative Study, Oxford: Oxford University Press
- Office of the United States Trade Representative (2014), Statement of the Ministers and Heads of Delegation for the Trans-Pacific-Partnership Countries, available at: http://www.ustr.gov/about-us/press-office/press-releases/2014/February/Statement-of-Ministers-and-Heads-of-Delegation-for-TPP-countries (accessed 20 May 2015)
- Ohly, A. (2008), "Patenttrolle" oder: Der patentrechtliche Unterlassungsanspruch unter Verhältnismäßigkeitsvorbehalt? Aktuelle Entwicklung im US-Patentrecht und ihre Bedeutung für das deutsche und europäische Patentsystem, GRUR Int. 2008, 787–798, Munich: C.H. Beck
- Ostergard, R.L. (2014), Economic Growth and Intellectual Property Rights Protection: A Reassessment of the Conventional Wisdom, in D. Gervais (Ed.), Intellectual Property, Trade and Development. Strategies to Optimize Economic Development in a TRIPS Plus Era, 2nd ed., Oxford: Oxford University Press
- Pappalardo, K. (2010), Google book search settlement, Queensland University of Technology, Brisbane, available at: http://eprints.qut.edu.au/31879/1/c31879.pdf (accessed 20 May 2015)
- Park, W.G. (2008), Intellectual Property Rights and International Innovation, in K. Maskus (Ed.), Frontiers of Economics and Globalization. Intellectual Property, Growth and Trade, Amsterdam: Elsevier
- Petersen, B. (2008), Injunctive Relief in the Post-eBay World, 23 Berkeley Tech. L.J. 2008, 193
 Phillips, J. (2009), eBay's Effect on Copyright Injunctions: When Property Rules give Way to Liability Rules, 24 Berkeley Tech. L.J. 2009, 405, Berkeley: UC Berkeley School of Law
- Ramsey, L.P. & Schovsbo, J. (2013), Mechanisms for Limiting Trade Mark Rights to Further Competition and Free Speech, 44 IIC 2013, 671, Munich/Berlin: C.H. Beck/Springer

- REUTERS (2013), Google Defeats Authors in U.S. Book-Scanning Lawsuit, available at: http://www.reuters.com/article/2013/11/14/us-google-books-idUSBRE9AD0TT20131114 (accessed 20 May 2015)
- Ricketson, S. (2002), The Three-Step Test, Deemed Quantities, Libraries and Closed Exceptions, Strawberry Hills: Centre for Copyright Studies Ltd
- Ricketson, S. & Ginsburg, J. (2006), International Copyright and Neighbouring Rights: The Berne Convention and Beyond, Vol. I, 2nd ed., Oxford: Oxford University Press
- Samuelson, P. (2009), Legally Speaking: The Dead Souls of the Google Booksearch Settlement, University of California, Communications of the ACM, Vol. 52, Berkeley – School of Law Public Law Research Paper No. 1387782, p. 28
- Solberg, T. (1906), Copyright Enactments of the United States (1783–1906), 2nd ed., Washington: G.P.O.
- The Guardian (2014), Apple and Samsung Agree to Drop Patent Lawsuits Outside US, press release of 6 August 2014, available at: http://www.theguardian.com/technology/2014/aug/06/apple-samsung-drop-patent-lawsuits-outside-usa (accessed 20 May 2015)
- The Verge (2014), Round Two: Apple and Samsung Suit Up for Another Billion Dollar Patent War, press release of 31 March 2014, available at: http://www.theverge.com/2014/3/31/5564134/round-two-apple-and-samsung-suit-up-for-another-billon-dollar-patent (accessed 20 May 2015)
- Trimble, M. (2012), Injunctive Relief, Equity, and Misuse of Rights in U.S. Patent Law, GRUR Int. 2012, 514, Munich: C.H. Beck
- Van Overwalle, G. (2006), The Implementation of the Biotechnology Directive in Belgium and its After-Effects. The Introduction of a New Research Exemption and a Compulsory Licence for Public Health, 37 IIC 2006, 889, Munich/Berlin: C.H. Beck/Springer
- Van Zimmeren, E. & Van Overwalle, G. (2011), A Paper Tiger? Compulsory License Regimes for Public Health in Europe, 42 IIC 2011, 4, Munich/Berlin: C.H. Beck/Springer
- Wischenbart, R. (2014), Content & Consulting, The Global eBook Report, available at: www. wischenbart.com/page-4 (accessed 20 May 2015)
- WTO (2011), Draft Decisions agreed on poorest Nations' Intellectual Property and 'Non-Violation', press release of 17 November 2011, available at: http://www.wto.org/english/news_e/news11_e/trip_17nov11_e.htm (accessed 20 May 2015)
- WTO (2013), The least developed get eight years more leeway on protecting intellectual property, press release of 11/12 June 2013, available at: http://www.wto.org/english/news_e/news13_e/trip_11jun13_e.htm (accessed 20 May 2015)
- Yu, P.K. (2011), ACTA and Its Complex Politics, 3 WIPO J. 2011, 1, Geneva: WIPO

Part III Systems Challenges

The Proportionality Principle in the TRIPS Agreement

Max Wallot

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Abstract This paper analyses whether the TRIPS Agreement contains a proportionality principle, what content it might have and how such a principle could affect the debate about intellectual property rights on an international level. It first briefly explains the conflicting interpretations of the Agreement as a framework in which the proportionality principle might be applied. In the second section the explicit and implicit sources, especially with regard to Articles 7 and 8 TRIPS, of such a principle are identified. Explaining the history, nature and normative content of these two provisions, the paper sheds light on the different functions of Articles 7 and 8 TRIPS and how the proportionality principle ties them together. Then,

Max Wallot, LL.M. (Stanford) is Rechtsreferendar in the district of the Berlin Court of Appeal.

M. Wallot (⊠)

Berlin Court of Appeal, Berlin, Germany e-mail: max.wallot@alumni.stanford.edu

different facets of a proportionality principle are explained, including its use as a "midlevel principle", its occurrence in WTO law and its dimension for human rights. The paper concludes that, while there is no uniform definition applicable to the TRIPS Agreement, many factors argue in favor of reading Articles 7 and 8 as expressing the principle of proportionality. If Articles 7 and 8 were read in this light, member states would benefit from an increased flexibility for designing national intellectual property laws and from a consolidation of a common ground in the international intellectual property discourse.

1 State of International Intellectual Property Harmonization

Today, the Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS)¹ is the seminal international treaty for intellectual property law.² The Agreement's great importance entails different approaches of construing its content. The evaluation of the status quo of international intellectual property harmonization through the TRIPS Agreement is basically split into two camps. On the one side, proponents of a strong intellectual property system focus rather on interests of the right holders.³ On the other side, critics of ever stronger intellectual property rights articulate concerns about developing countries' chances to benefit from the Agreement, lack of technology transfer and generally a diminished recognition of user rights.⁴ Roughly along those lines, one may discern two different approaches in construing the TRIPS Agreement that are relevant in regard to further investigations for a potential proportionality principle in TRIPS.

¹ All articles without title are references to the Agreement on Trade-Related Aspects of Intellectual Property Rights, 15 April 1994, 33 I.L.M. 81 (1994) [hereinafter TRIPS].

² See, W. Cornish & K. Liddell (2015), The Origins and Structure of the TRIPS Agreement, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 3 (this volume); H. Ullrich (2015), The Political Foundations of TRIPS Revisited, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 85 (this volume).

³ See, e.g., R. Epstein (2010), The Disintegration of Intellectual Property?: A Classical Liberal Response to a Premature Obituary, 62 Stanford L. Rev. 2010, 455; J. Straus (1996), Implications of the TRIPS Agreement in the Patent Field, in F.K. Beier & G. Schricker (Eds.), From GATT to TRIPS.

⁴ See, e.g., Declaration on Patent Protection: Regulatory Sovereignty under TRIPS (Version 1.0 of 15 April 2014), published in 45 IIC 2014, 679; Ch. Geiger, J. Griffiths & R. Hilty (2008), Declaration: A Balanced Interpretation of the "Three-Step Test" in Copyright Law, 39 IIC 2008, 707; G. Dinwoodie & R. Dreyfuss (2012), A Neofederalist Vision of TRIPS – The Resilience of the International Intellectual Property Regime.

One may hold the view that TRIPS is basically a comprehensive supranational code concerning the international aspects of intellectual property. The standards it enshrines, they claim, generalized norms that incorporate a value-based judgment in their application, give the signatory states no, or only very limited, discretion. They are rather calls for the Dispute Settlement Body to fill the gaps of this incomplete contract. The whole Agreement creates a comprehensive agenda for implementing strict intellectual property laws, regardless of the level of development of a country—TRIPS mandates what to do, and when and how to do it. Indeed, especially in the early days of the Agreement, the panels tended to construe TRIPS as a rigid code with very limited flexibilities for member states. This comes with substantial disadvantages because the panel decisions do not discuss the underlying policy ideas of the TRIPS Agreement and they hamper a dynamic development of the provisions and an updated interpretation over time. Some commentators have pointed out that this results in a one-way development of "freeze-plus dynamics" entailing ever stronger rights on an international level.

However, there are many good arguments against seeing the TRIPS framework as a rigid corset for its member states. For one thing, decisions of the Appellate Body have confirmed that the member states do have discretion in implementing TRIPS and are allowed to protect their autonomy interests in regard to their legal system and practice, as mentioned in Article 1(1). While in the *India – Pharmaceuticals* decision, concerning the question whether India had implemented the so-called "mailbox provision" (Article 70(8)) correctly, the Appellate Body explained that TRIPS should be interpreted literally and that "legitimate

⁵G. Mossinghoff (2000), National Obligations under Intellectual Property Treaties: The Beginning of a True International Regime, 9 Fed. Circuit B.J. 2000, 591, 603; J. Straus (1996), Bedeutung des TRIPS für das Patentrecht, 55 GRUR Int. 1996, 179; P. Yu (2004), Currents and Crosscurrents in the International Intellectual Property Regime, 38 Loy. L.A. L. Rev. 2004, 323, 442.

⁶ K. Saggi & J. Trachtman (2011), Incomplete Harmonization Contracts in International Economic Law: Report of the Panel, China – Measures Affecting the Protection and Enforcement of Intellectual Property Rights, WT/DS362/R, adopted 20 March 2009, 10 World Trade Rev. 2011, 63.

⁷G. Mossinghoff (2000), National Obligations under Intellectual Property Treaties: The Beginning of a True International Regime, 9 Fed. Circuit B.J. 2000, 591, 603.

⁸ G. Dinwoodie & R. Dreyfuss (2012), A Neofederalist Vision of TRIPS – The Resilience of the International Intellectual Property Regime, p. 8.

⁹ A. Kur (2009), Of Oceans, Islands, and Inland Water – How Much Room for Exceptions and Limitations under the Three-Step Test?, 8 Rich. J. Global L. & Bus. 2009, 287, 326.

¹⁰ The term "freeze-plus dynamics" means that either the status quo remains the same or right holders are able to increase the level of protection for intellectual property rights.

¹¹ A. Kur (2009), Of Oceans, Islands, and Inland Water – How Much Room for Exceptions and Limitations under the Three-Step Test?, 8 Rich. J. Global L. & Bus. 2009, 287, 327; M. Senftleben (2004), Copyright, Limitations and the Three-Step Test: An Analysis of the Three-Step Test in International and EC Copyright Law, p. 174.

expectations" are not captured by an extensive interpretation. ¹² The recent panel decision *China – Measures affecting the Protection and Enforcement of Intellectual Property Rights* ¹³ shows a stronger emphasis of national leeway. The panel found, inter alia, that China was not violating Article 61 in regard to criminal sanctions. The exact details will be discussed further below but it is clear from the reasoning of the panel that the narrow interpretation in earlier cases has been softened in favor of increased flexibility. ¹⁴ It should also be mentioned that the system of panel reports lacks a *stare decisis* doctrine; thus future panels might deviate from what other panels ruled in the past. ¹⁵ So even within the WTO system there is a considerable amount of flexibility to develop the interpretations of TRIPS over time.

Moreover, since the early days of TRIPS, the respect of member states' sovereignty in regard to implementation has been a frequent topic of discussion. ¹⁶ The Agreement mentions this principle explicitly in Article 1(1). Thus it is justified to infer that member states generally have some leeway in the implementation process. Moreover, the setting in which TRIPS was concluded, with a focus on international trade, implies a flexible framework. This is based on the idea that intellectual property rights are not an end in themselves but rather tools to facilitate innovation and transfer of technology. ¹⁷ TRIPS mentions both goals extensively in the text, such as in Articles 7, 8(2), 40(1) and 66(2). If one acknowledges that intellectual property rights have a rationale in combating a market failure or "dysfunctional distortion of competition", ¹⁸ it becomes quite clear that the member states need flexibilities in implementing the TRIPS Agreement as market failures can vary from country to country and in different fields of intellectual property as well. The primacy of free competition on the merits ¹⁹ should be the backdrop against which intellectual property rights in TRIPS have to be construed.

¹² Appellate Body Report, India – Patent Protection for Pharmaceutical and Agricultural Chemical Products, WT/DS50/AB/R, adopted 16 January 1998, DSR 1998:I, p. 9.

¹³ Panel Report, China – Measures Affecting the Protection and Enforcement of Intellectual Property Rights, WT/DS362/R, adopted 20 March 2009, DSR 2009:V, p. 2097.

¹⁴P. Yu (2011), TRIPS Enforcement and Developing Countries, 26 Am. U. Int'l L. Rev. 2011, 727, 781.

¹⁵ M. Lennard (2002), Navigating by the Stars: Interpreting the WTO Agreements, 5 J. Int'l Econ. L. 2002, 17, 33.

¹⁶ H. Ullrich (1996), Technology Protection According to TRIPs: Principles and Problems, in F.-K. Beier & G. Schricker (Eds.), From GATT to TRIPs – The Agreement on Trade-Related Aspects of Intellectual Property Rights, pp. 357–400.

¹⁷ M. Lemley (2009), A Cautious Defense of Intellectual Oligopoly with Fringe Competition, 5 Rev. L. & Econ. 2009, 1025.

¹⁸R. Hilty (2011), Individual, Multiple and Collective Ownership – What Impact on Competition?, Max Planck Institute for Intellectual Property and Competition Law Research Paper No. 11–04, pp. 4, 6, available at: http://ssrn.com/abstract=1774802 (accessed 1 June 2015) (pointing out that legal intervention to combat market failure is a risky undertaking because of uncertainties on how market forces actually work).

¹⁹Concerning the primacy of free competition see R. Hilty (2007), The Law against Unfair Competition and its Interfaces, in R. Hilty & F. Henning-Bodewig (Eds.), Law Against Unfair Competition: Towards a New Paradigm in Europe?, pp. 1–52; A. Kur (2009), Of Oceans, Islands,

Furthermore, the TRIPS Agreement cannot be a rigid code of intellectual property protection because there has been a constant push for more comprehensive protection since TRIPS was concluded, e.g. in the form of FTAs or ACTA. Finally, the TRIPS Agreement must be seen in continuity with the Berne and Paris Conventions and sticking to their principle of national autonomy—expressed firmly in the territoriality principle. Some even argue cogently that TRIPS is therefore best construed as a flexible "neofederalist regime" rather than as a rigid code of international IP. This focus on flexibility, albeit without the notion of a neofederalist regime, has been set forth in many ways and shall present a point of departure and a framework for the analysis of a proportionality principle within the TRIPS Agreement.

2 Proportionality Principle in the TRIPS Agreement

2.1 Significance and Meaning of the Proportionality Principle

The proportionality principle has seen a steep rise in estimation on the global legal stage.²² It is one of the leading manifestations of reasonableness in law and is known in many European countries and beyond.²³ It is also a general concept of international law.²⁴ To some extent one can see it as a cornerstone of judicial review.²⁵ Therefore, it is a concept that has many different facets which will be explained in detail below.²⁶ For the moment, it shall suffice to understand the word "proportional" as pointing at two "things" that are related in a certain way. Thus, the focus in this section can remain on the significance and semantics in regard to a

and Inland Water – How Much Room for Exceptions and Limitations under the Three-Step Test?, 8 Rich. J. Global L. & Bus. 2009, 287, 341.

²⁰ S. Sell (2011), TRIPS Was Never Enough: Vertical Forum Shifting, FTAs, ACTA, and TPP, 18 J. Intell. Prop. L. 2011, 447.

²¹ G. Dinwoodie & R. Dreyfuss (2012), A Neofederalist Vision of TRIPS – The Resilience of the International Intellectual Property Regime.

²² A. Sweet & J. Mathews (2009), Proportionality, Judicial Review, and Global Constitutionalism, in G. Bongiovanni, G. Sartor & C. Valentini (Eds.), Reasonableness and Law, pp. 173–212.

²³ E. Engle (2013), The General Principle of Proportionality and Aristotle, in L. Huppes-Cluysenaer & N.M.M.S. Coelho (Eds.), Aristotle and the Philosophy of Law: Theory, Practice and Justice, pp. 265, 266; I. Porat (2009), Some Critical Thoughts on Proportionality, in G. Bongiovanni, G. Sartor & C. Valentini (Eds.), Reasonableness and Law, p. 243.

²⁴ G. Marceau & J.P. Trachtman (2004), GATT, TBT and SPS: A Map of WTO Law of Domestic Regulation of Goods, in F. Ortino & E. Petersmann (Eds.), The WTO Dispute Settlement System 1995-2003, pp. 275, 288.

²⁵ D. Beatty (2004), The Ultimate Rule of Law, pp. 159–188.

²⁶ See Sect. 4.

proportionality principle. The term's profound influence on the legal discourse itself has led some authors to proclaim that the proportionality principle has "won the ultimate victory"²⁷—a statement which is probably true. The reason for this is that it is arguably of great importance to a modern liberal democracy and to the extent of its citizens' basic liberties. As Rawls describes the ideal in his "First Principle of Justice", "each person is to have an equal right to the most extensive scheme of equal basic liberties compatible with a similar scheme of liberties for others". 28 The idea that liberties of citizens must be compatible with each other necessitates careful balancing of conflicting rights; where it is not possible to realize each liberty or each right to its full extent, the principle of proportionality must assign weights to the different rights whereby they can be put in proportion to each other. Letting the conflicting liberties unfold to a proportionate extent seems to be a feasible solution to the problem of optimal realization of rights. Especially if a liberal democracy accepts multiple conceptions of "the good", the proportionality principle becomes crucial because it fosters an "overlapping consensus" within society.³⁰ Whereas the general significance of the proportionality principle is thus uncontested, the actual meaning of the concept is not completely clear.

The legal discourse lacks a uniformly valid definition of the term. Depending on the jurisdiction as well as the specific circumstances within a particular jurisdiction the proportionality principle has distinct connotations. At this point, the description of different approaches shall be postponed so that the focus can remain on the question *whether* this important, yet polymorphic, principle exists in TRIPS. The follow-up question of *how* the principle might be construed is thus detached from the first one and will be covered further below. Nevertheless, three distinctions concerning the content of the proportionality principle should be made at this point already.

First of all, it should be clarified that in this paper an *internal* proportionality principle is analysed, i.e. the question is whether the provisions of TRIPS can be construed to contain such a principle. Therefore, only the provisions of the TRIPS Agreement itself are relevant here. Any *external* proportionality, e.g. of remedies because of violations of TRIPS rules that belong to the broader WTO system,³¹ is beyond this paper's scope. Second, the distinction between ex-post and ex-ante

²⁷ I. Porat (2009), Some Critical Thoughts on Proportionality, in G. Bongiovanni, G. Sartor & C. Valentini (Eds.), Reasonableness and Law, p. 243.

²⁸ J. Rawls (1999), A Theory of Justice – Revised Edition, p. 53.

²⁹ This term was coined by Rawls and means that different citizens in a democracy can support the same basic laws and principles regardless of the different reasons they might have, e.g. because of their different theistic, agnostic or atheistic belief systems.

³⁰ G. Bongiovanni & C. Valentini (2009), Reciprocity, Balancing and Proportionality: Rawls and Habermas on Moral and Political Reasonableness, in G. Bongiovanni, G. Sartor & C. Valentini (Eds.), Reasonableness and Law, pp. 81, 91–95 (explaining how the concept of reciprocity and proportionality are interlinked in Rawls' theory).

³¹ For this external view, see T. Sebastian (2007), World Trade Organization Remedies and the Assessment of Proportionality: Equivalence and Appropriateness, 48 Harv. Int'l L.J. 2007, 337.

proportionality is crucial.³² The ex-ante proportionality principle refers to the design of the intellectual property rights itself. It encompasses e.g. the rules about protectable subject matter and protection requirements. In contrast to that, the ex-post proportionality principle applies after intellectual property rights have been granted. It is exercised by the courts through their decisions. Because the TRIPS Agreement sets the framework for the signatory states to create their own national intellectual property laws, any proportionality principle will inevitably influence the legislative process. It is therefore not an ex-post principle applied by the courts but an ex-ante idea that is reflected in the implementation into national law. Third, one should distinguish between explicit and implicit proportionality in the TRIPS Agreement. The approach followed here is a closer look at the exact wording of each provision in TRIPS in order to find explicit uses of the word "proportionality" and its derivatives or close semantic relatives. This entails an analysis of rather general provisions in TRIPS that might refer to the concept of proportionality implicitly.

2.2 Explicit Proportionality in the TRIPS Agreement

The term "proportionality" is explicitly mentioned solely in Articles 46 and 47. Article 46 deals with the proportionality between the seriousness of an infringement and the remedies of destruction or disposal of the infringing good. Article 47 provides for a right of information:

Members may provide that the judicial authorities shall have the authority, unless this would be out of proportion to the seriousness of the infringement, to order the infringer to inform the right holder of the identity of third persons involved in the production and distribution of the infringing goods or services and of their channels of distribution.

Generally, this provision is seen as a tool against piracy of protected goods.³³ The proportionality principle can be relevant, for instance, in cases in which a distributor has ordered and paid for infringing merchandise apparel without knowing that the clothes infringe trademarks.³⁴

2.3 Implicit Proportionality in the TRIPS Agreement

Besides the explicit reference to "proportionality", there are some provisions that use terms that are semantically similar and could imply the idea of proportionality.

³² R. Merges (2011), Justifying Intellectual Property, pp. 182–184.

³³D. Gervais (2012), The TRIPS Agreement: Drafting History and Analysis, Art. 47 para. 2.564.

³⁴ C. Correa (2007), Trade Related Aspects of Intellectual Property Rights – A Commentary on the TRIPS Agreement, p. 429.

These provisions could be understood as standards that incorporate a "weight or importance". These norms are not either true or false, i.e. they defy a clear binary application, but they have a more malleable form. They can be realized to a certain extent. Such norms prescribe that a goal should be realized to the highest degree possible under certain circumstances. There are a few words in the TRIPS Agreement that convey this weight in which the proportionality principle is reflected. These are: "appropriate", "reasonable" and "balanced". The usage of these terms that might reflect the proportionality principle equally well must also be taken into consideration.

First, let us examine the meanings of the words in the legal context. The word "appropriate" does not directly compare two different situations or figures, ³⁷ but it is akin to proportionality in that it aims, for example, at scrutinizing the enforcement of a right in the light of the overall interests involved. It incorporates a strong component of a value-based judgment and slightly resembles a moral judgment, i.e. it is steeped in evaluations that are sometimes barely quantifiable. The actions that seem to be appropriate for some are inappropriate for others, depending on the specific moral views people hold.

The same is true of the word "reasonable", which is usually defined as "fair, proper, or moderate under the circumstances" or as "a generic and relative [term that] applies to that which is appropriate for a particular situation". This is confirmed by the panel report in the case *United States – Section 110(5) of the US Copyright Act*, which states that "reasonable" means "proportionate" and also refers to appropriateness, in the phrase "within the limits of reason, not greatly less or more than might be thought likely or appropriate".

Similarly, the term "balance" is interrelated with proportionality because it expresses a certain equilibrium between two states. From a doctrinal point of view, it has been argued that "balancing" and "proportionality" have different origins, but serving the same tasks, as they are conceptually inseparable. ⁴¹ This conceptual affinity is based on the use of the words in everyday language: if rights and obligations are imbalanced, they are out of proportion. Not only is the meaning

³⁵R. Dworkin (1967), The Model of Rules, 35 U. Chi. L. Rev. 1967, 14, 25-27 (distinguishing between principles which have a dimension of weight and rules which lack this dimension but instead can be *functionally* important or unimportant).

³⁶ R. Alexy (2009), A Theory of Constitutional Rights, p. 67.

³⁷ Such as in a ratio test, see R. Merges (2011), Justifying Intellectual Property, p. 171.

³⁸ Black's Law Dictionary (9th ed. 2009), p. 1379.

³⁹ West's Encyclopedia of American Law Vol. 8 (2nd ed. 2005), p. 246.

⁴⁰ Panel Report, United States – Section 110(5) of the US Copyright Act, WT/DS160/R, adopted 27 July 2000, DSR 2000:VIII, p. 3769, para. 6.225.

⁴¹ I. Porat (2009), Some Critical Thoughts on Proportionality, in G. Bongiovanni, G. Sartor & C. Valentini (Eds.), Reasonableness and Law, pp. 243, 248 (discussing different origins in US and German constitutional law).

of words derived through their use in the language, 42 but the use also shapes legal concepts.

Now let us look at the settings where these three words are used within the TRIPS Agreement. The term "appropriate means" for the enforcement of intellectual property is already mentioned in the preamble of the TRIPS Agreement and is used again in Article 8(2) in regard to the prevention of abuses of intellectual property rights, as well as in Article 40(2) in regard to controlling anti-competitive practices. Other uses of the word "appropriate" are found in the Articles 1(1), 43(1), 45(2), 48(1), 48(2), 50(2), 50(7), 55, 56, 58(c), 61 and 68. However, these norms do not deal directly with intellectual property rights but are about procedural details such as the method of implementing the provisions of TRIPS, evidence, remedies, provisional measures and the TRIPS Council. Thus, they refer to "appropriate" cases, attorney's fees, compensation or arrangements and are not of primary interest for our analysis. Rather, we shall focus on the implications of a proportionality principle for the intellectual property rights themselves.

The term "reasonable" is first used in Article 8(2) in regard to measures that might be taken to prevent owners from resorting to practices which unreasonably restrain trade. Furthermore, reasonable terms, periods and royalties are relevant in the case of uses without the authorization of the right holder in Articles 31(b) and (l) (ii) and 37(1). Additionally, the word "reasonable" is used in TRIPS Articles 15(5), 34(1)(b), 41(2), 43(1), 43(2), 44(1), 45(1), 45(2), 50(4), 50(6), 52, 53(2), 55, 62(1), 62(2). Again, these Articles do not directly deal with the intellectual property right but refer to "reasonable" opportunities for petitions, reasonable efforts, time-limits, evidence, remedies, procedures and periods. More crucially, Article 7 refers explicitly to a "balance of rights and obligations" and mentions different objectives of intellectual property law and TRIPS in general that need to be balanced. This provision provides a "powerful textual hook" for interpreting the whole agreement in a more differentiated manner. ⁴³ It thus warrants further consideration together with Article 8 in the search for a proportionality principle.

2.4 Articles 7 and 8 as Focal Points for Proportionality in TRIPS

Article 7 is an adequate normative "hook" for the principle, because it contains the objectives of the TRIPS Agreement in wording that alludes to proportionality in many ways. It is the "balance of rights and obligations" as well as the "mutual advantage" that catches one's attention. This aim of "balance" and a "mutual

⁴² L. Wittgenstein (1953), Philosophical Investigations, § 43.

⁴³ G. Dinwoodie & R. Dreyfuss (2012), A Neofederalist Vision of TRIPS – The Resilience of the International Intellectual Property Regime, p. 110.

advantage" sets the tone for the whole Agreement⁴⁴ and shows that the wording was influenced by a more profound principle of proportionality. Besides the wording, the broader context shows that Article 7 serves as a framework of policy controls in which the patent system has to operate.⁴⁵

Additionally, Article 8(1) sets forth a necessity standard in regard to measures that aim at protecting public health and nutrition as well as the public interest in sectors of vital importance. Some argue that this necessity standard should be read as a proportionality test itself. 46 Thus, it should follow a scheme that resembles a proportionality test under German constitutional law, with three sub-tests: (1) suitability (2) necessity and (3) proportionality *stricto sensu*.⁴⁷ Furthermore, the reading of Articles 7 and 8 as a culmination point for a proportionality principle is in line with the idea that since the Doha Declaration both norms have an elevated status and are of pivotal importance. 48 The legal status of the Doha Declaration is disputed, though. ⁴⁹ Nevertheless, one may assume that it constitutes a "decision" according to Article IV(1) and IX(1) Agreement Establishing the WTO because the Doha Declaration was debated and negotiated extensively and was promulgated unanimously. 50 This indicates that the WTO Dispute Settlement Body could take a closer look at how these provisions should be interpreted in the context of the Agreement as a whole, especially with respect to the need for "balance". ⁵¹ This also means that the focus is shifted away from the preamble of TRIPS. It definitely contains ideas for balancing as well; however, as they are put forward at the very beginning of TRIPS and not in the actual provisions, they should rather be seen as a supporting argument but not the source for implementing a proportionality principle. Some go even further and hold the view that a preamble has no legal obligations at all. 52 However, the character of the TRIPS preamble as a legal obligation is

A. Taubman, H. Wager & J. Watal (2012), A Handbook on the WTO TRIPS Agreement, p. 13.
 Declaration on Patent Protection: Regulatory Sovereignty under TRIPS (Version 1.0 of 15 April 2014), p. 3.

⁴⁶ E.B. Rodrigues Jr. (2012), The General Exception Clauses of the TRIPS Agreement, pp. 54–61.

⁴⁷ M. Andenas & S. Zleptnig (2007), Proportionality and Balancing in WTO Law: A Comparative Perspective, 20 Cambridge Rev. of Int'l Affairs 2007, 71, 74-77, 89; E.B. Rodrigues Jr. (2012), The General Exception Clauses of the TRIPS Agreement, pp. 56–60.

⁴⁸ D. Gervais (2012), The TRIPS Agreement: Drafting History and Analysis, Art. 7 para. 2.114; UNCTAD/ICTSD, Resource Book on TRIPS and Development, p. 132.

⁴⁹ S. Charnovitz (2002), The Legal Status of the Doha Declaration, 5 J. Int'l Econ. L. 2002, 191, 211.

⁵⁰ S. Charnovitz (2002), The Legal Status of the Doha Declaration, 5 J. Int'l Econ. L. 2002, 191, 211; H. Grosse Ruse-Khan (2008), Proportionality and Balancing within the Objectives for Intellectual Property Protection, in P.L.C. Torremans (Ed.), Intellectual Property and Human Rights – Enhanced Edition of Copyright and Human Rights, pp. 161, 184.

⁵¹ D. Gervais (2012), The TRIPS Agreement: Drafting History and Analysis, Art. 7 para. 2.114.

⁵²Concerning the limited legal obligations found in the preamble of the Charter of the United Nations, see H. Kelsen (2008), The Law of the United Nations: A Critical Analysis of its Fundamental Problems, p. 9.

not the main focus here but rather its source as an interpretative framework. The TRIPS preamble has the same relevance as other parts of the treaty for its interpretation. This view is supported by Article 31(2) Vienna Convention on the Law of Treaties, which explicitly enumerates the preamble as a source for the interpretation of the treaty. According to Article 3(2) Dispute Settlement Understanding, the customary rules of interpretation of public international law shall be applicable to WTO treaties.

Finally, Article 8(2) refers to the prevention of an abuse of intellectual property rights. This clause is complex, as the meaning of "abuse of intellectual property rights" has several dimensions, which will only be briefly explained here. First, the prohibition of an abuse of rights is a fundamental concept in many legal traditions. It is closely linked to the proportionality principle because the latter is a corollary of the doctrine of abuse of rights. Not every abuse of a right is based on a disproportional use of rights. Nor is every disproportionate exercise of rights an abuse of rights. However, sometimes this might be the case, because an abuse of rights is characterized by the "use of the right with no relation to its purpose". In some instances it is clearly not the purpose of a right to be exercised in a disproportionate manner, albeit the parties in private law usually do not have the duty to exercise their rights proportionally. That means the doctrine of the abuse of rights draws the limits of rights that are in conflict with each other. One method for achieving this is the proportionality principle.

Second, one does not have to exercise an intellectual property right in order to "abuse" it—the mere failure to work an invention might also constitute an abuse. Finally, the provision contains an antitrust dimension but is broader than that, as there is no requirement of a dominant position, and also refers to aspects of the US patent or copyright "misuse doctrine". Therefore, an abusive contractual exploitation of the intellectual property right as well as unilateral conduct of the right holder might be sanctioned. Member states can—but are by no means obliged to—enact competition laws that curb anti-competitive use of intellectual property. Overall, the member states retain a great discretion in defining what constitutes an abuse of intellectual property rights. 57

Therefore, it is justified to conclude that Articles 7 and 8 contain some "weight or importance" and are open for proportionality considerations. Given the fact that they

⁵³ F. Höhne (2013), Preamble, in J. Busche, P. Stoll & A. Wiebe (Eds.), TRIPs: Internationales und europäisches Recht des geistigen Eigentums, pp. 77, 79.

⁵⁴ B. Cheng (1953), General Principles of Law as applied by International Courts and Tribunals, pp. 130–132; E.B. Rodrigues Jr. (2012), The General Exception Clauses of the TRIPS Agreement, p. 86.

⁵⁵ See Article 5A(2) Paris Convention for the Protection of Intellectual Property.

⁵⁶ A. Heinemann (1995), Das Kartellrecht des geistigen Eigentums im TRIPS-Übereinkommen der Welthandelsorganisation, 54 GRUR Int. 1995, 535, 537.

⁵⁷ B. Conde Gallego (2010), Intellectual Property Rights and Competition Policy, in C.M. Correa (Ed.), Research Handbook on the Protection of Intellectual Property under WTO Rules- Intellectual Property in the WTO, Volume 1, pp. 226, 231–234.

are found under the headings "objectives" and "principles" and are located in part one of the agreement that lays down the basic framework, both provisions must be analysed in greater detail to find out how they reflect the proportionality principle.

3 Normative Content of Articles 7 and 8 TRIPS

3.1 Structure and Context

Article 7, under the heading "Objectives", reads:

The protection and enforcement of intellectual property rights should contribute to the promotion of technological innovation and to the transfer and dissemination of technology, to the mutual advantage of producers and users of technological knowledge and in a manner conducive to social and economic welfare, and to a balance of rights and obligations.

Article 7 was introduced into the Agreement by a group of developing countries. State in to protect or enforce intellectual property rights. The main purpose of the provision is to provide guidance in interpreting the TRIPS Agreement by taking all the factors listed, such as transfer and dissemination of technology, into account. On the face of it, Article 7 contains merely the objectives in a simple sequence. A closer look, however, reveals a parallel structure that is a remarkable argument for balance and proportionality. The objectives are carefully paired so that the goal of "promoting innovation" is balanced against "the dissemination of technology", and furthermore, "producers" as well as "users" should benefit. Finally, both "social" and "economic" welfare need to be balanced. This array of objectives clearly shows a subtle striving for a proportionate arrangement of intellectual property norms.

It is remarkable, however, that this provision rather focuses on technological innovation and thus does not deal with trademarks or non-technology related copyrights. ⁶² Nevertheless, Article 7 must be read together with Article 8, so it is still relevant for intellectual property rights other than patents. ⁶³ Article 8, under the heading "Principles", provides:

1. Members may, in formulating or amending their laws and regulations, adopt measures necessary to protect public health and nutrition, and to promote the public interest in

⁵⁸ See GATT document MTN.GNG/NG11/W/71 of 14 May 1990.

⁵⁹ D. Gervais (2012), The TRIPS Agreement: Drafting History and Analysis, Art. 7 para. 2.111. ⁶⁰ Ibid.

⁶¹ See H. Grosse Ruse-Khan (2008), Proportionality and Balancing within the Objectives for Intellectual Property Protection, in P.L.C. Torremans (Ed.), Intellectual Property and Human Rights – Enhanced Edition of Copyright and Human Rights, pp. 161, 173–174.

⁶² C. Correa (2007), Trade Related Aspects of Intellectual Property Rights – A Commentary on the TRIPS Agreement, p. 92.

⁶³ Ibid.

- sectors of vital importance to their socio-economic and technological development, provided that such measures are consistent with the provisions of this Agreement.
- Appropriate measures, provided that they are consistent with the provisions of this Agreement, may be needed to prevent the abuse of intellectual property rights by right holders or the resort to practices which unreasonably restrain trade or adversely affect the international transfer of technology.

Article 8 touches upon several additional issues that are not mentioned in Article 7 and will be analysed below. Because of its close legislative origin to Article 7, Article 8 provides the context for further interpretation of the TRIPS Agreement.⁶⁴

As a contextual argument one can point to the prominent position of the Articles, which makes the concept more substantial. Their heightened importance is also shown in paragraph 19 of the Doha Ministerial Declaration, which indicates that the TRIPS Council should be guided by Article 7. One can argue that this might have contributed to a higher legal status of the provision but others point out that it might only be invoked in the context of the fundamental tension between rewarding the owners of intellectual property and promoting third-party access to intellectual property rights, to tip a decision of the dispute panel in favor of one or the other. ⁶⁵

Finally, Article 31 of the Vienna Convention on the Law of Treaties⁶⁶ stipulates that the purpose of an international treaty shall be used as a framework for its interpretation. Although the Appellate Body of the WTO holds the view that the interpretation must be based above all upon the text of the treaty,⁶⁷ it allows for a teleological approach as well when the wording of a provision is inconclusive.⁶⁸ Thus, there is also normative support in international law for using Articles 7 and 8 as interpretative guidelines for construing TRIPS. If Article 7 plays a crucial role in construing other norms of the Agreement, one could infer that it must include some sort of balancing of interests, hence a proportionality principle.⁶⁹ However,

⁶⁴ C. Correa (2007), Trade Related Aspects of Intellectual Property Rights – A Commentary on the TRIPS Agreement, p. 93.

⁶⁵ D. Gervais (2012), The TRIPS Agreement: Drafting History and Analysis, Art. 7 paras. 2.111-2.114.

⁶⁶ Vienna Convention on the Law of Treaties Article 31(1) reads: "A treaty shall be interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in the light of its *object* and *purpose*." (emphasis added by author).

⁶⁷ Appellate Body Report, Japan – Taxes on Alcoholic Beverages, WT/DS8/AB/R, WT/DS10/AB/R, WT/DS11/AB/R, adopted 1 November 1996, p. 10.

⁶⁸ Appellate Body Report, United States – Import Prohibition of Certain Shrimp and Shrimp Products, WT/DS58/AB/R, adopted 6 November 1998, para. 114; However, the Appellate Body seems to accept a hierarchy between the particular object of a norm and of the treaty itself. This approach is disputable, as it is not consistent with the wording of Article 31(1) VCLT, see H. Grosse Ruse-Khan (2008), Proportionality and Balancing within the Objectives for Intellectual Property Protection, in P.L.C. Torremans (Ed.), Intellectual Property and Human Rights – Enhanced Edition of Copyright and Human Rights, pp. 161, 181.

⁶⁹ See, H. Grosse Ruse-Khan (2008), Proportionality and Balancing within the Objectives for Intellectual Property Protection, in P.L.C. Torremans (Ed.), Intellectual Property and Human Rights – Enhanced Edition of Copyright and Human Rights, pp. 161, 169–170.

the exact extent to which Articles 7 and 8 are applicable in the interpretation of other norms in the treaty is controversial.

3.2 Interpretative Function

The different approaches are reflected in the case *Canada – Patent Protection for Pharmaceutical Products*. This dispute arose over the regulatory review and stockpiling exceptions in Canadian patent law and was brought to the dispute panel by the European Communities.

Canada argued for an extensive interpretative power of Articles 7 and 8, so that member states would have greater flexibility in adjusting patent rights according to the factors mentioned in the provision. The European Communities, however, held the view that the two Articles must not be used to renegotiate TRIPS and that they reflect mere policy considerations that were already taken into account during the negotiation of TRIPS. The panel tried to reconcile these two approaches by stating that the basic balance should not be touched by Articles 7 and 8 but that "the goals and limitations stated in [the two Articles] must obviously be borne in mind". This does not clarify what member states are allowed to do in interpreting other norms of the Agreement the member states are allowed to do in interpreting other norms of the Agreement Themselv, this stance would be even stronger today because the more recent case China – Measures Affecting the Protection and Enforcement of Intellectual Property Rights shows greater consideration of specific circumstances of member states.

The three measures at issue in the case were: (1) the threshold established by China for criminal procedures and penalties for the infringement of IP rights,

⁷⁰ Panel Report, Canada – Patent Protection of Pharmaceutical Products, WT/DS114/R, adopted 7 April 2000, DSR 2000:V, p. 2289.

⁷¹ This exception allows potential competitors of the patent owner to use the patented invention without authorization in order to get government marketing approval. The competitors may start selling the goods after the patent has expired.

⁷² This exception allows competitors to produce and stockpile patented goods during a certain period before the expiration of the patent. However, the goods cannot be sold until after the patent expires.

⁷³ Panel Report, Canada – Patent Protection of Pharmaceutical Products, WT/DS114/R, adopted 7 April 2000, para. 7.24.

⁷⁴ Ibid., para. 7.25.

⁷⁵ Ibid., para. 7.26.

⁷⁶ C. Correa (2007), Trade Related Aspects of Intellectual Property Rights – a Commentary on the TRIPS Agreement, p. 102.

⁷⁷P. Yu (2010), The Objectives and Principles of the TRIPS Agreement, in C. Correa (Ed.) Research Handbook on the Protection of Intellectual Property under WTO Rules – Intellectual Property in the WTO Volume I, pp. 146, 150–151.

(2) China's measures that governed the disposal of goods infringing intellectual property and (3) Article 4 Chinese Copyright Law, which denied protection to censored works.

In regard to claim (1) specifically, China was not applying criminal sanctions to certain intellectual property infringements that were not on a commercial scale regarding the Chinese market. Therefore, some intellectual property goods did not receive protection by criminal law when the infringement was below a certain numerical figure that was too high in the opinion of the US. Though the panel did not endorse the Chinese threshold for criminal sanctions it took the specific circumstances of the Chinese market into account and underscored the necessity of flexibility in regard to Article 61. Particularly, the panel stated that the term "infringements on a commercial scale" includes "qualitative and quantitative elements" and leaves some leeway in regard to the circumstances, i.e. the Chinese market place. Though the panel did not rule that China acted lawfully according to TRIPS, the Chinese threshold was upheld because the US failed to substantiate their claim.

In regard to claim (2), China prevailed to a considerable degree. The panel found the practice of auctioning off the intellectual-property-infringing goods after the simple removal of trademarks inconsistent with TRIPS. However, the panel upheld the Chinese practices concerning donations, sales to rights holders and auctions in general. Finally, in regard to claim (3) China was found to violate Articles 9(1) and 41(1) by not granting copyright protection to censored works, as it, inter alia, did not explain persuasively why "censorship interferes with copyright owners' rights to prevent third parties from exploiting prohibited works".⁸¹

In sum, the decision in the case can be viewed as a tie—on the one hand China violated TRIPS in not granting copyright protection for censored works but on the other hand China won some flexibility in regard to the specific implementation of TRIPS into its own intellectual property law.

This result is remarkable as it shows the willingness of the panel to create a flexible, more balanced reading of TRIPS. It is striking, though, that the panel did not make explicit use of Articles 7 or 8. It stands in stark contrast to the use of both Articles in the *Canada – Patent Protection of Pharmaceutical Products* case. Whether this approach is the appropriate one is questionable. While the overall result of a higher degree of flexibility is laudable, it would be more convincing to rely on Articles 7 and 8. Avoiding these prominent norms might eventually

⁷⁸ Panel Report, China – Measures Affecting the Protection and Enforcement of Intellectual Property Rights, WT/DS362/R, adopted 20 March 2009, paras. 7.600-7.601; P. Yu (2011), TRIPS Enforcement and Developing Countries, 26 Am. U. Int'l L. Rev. 2011, 727, 757–759.

⁷⁹ Panel Report, China – Measures Affecting the Protection and Enforcement of Intellectual Property Rights, WT/DS362/R, adopted 20 March 2009, para. 7.538.

⁸⁰ P. Yu (2011), TRIPS Enforcement and Developing Countries, 26 Am. U. Int'l L. Rev. 2011, 727, 734.

⁸¹ Panel Report, China – Measures Affecting the Protection and Enforcement of Intellectual Property Rights, WT/DS362/R, adopted 20 March 2009, para. 7.133.

contribute to decreasing the credibility of the ruling. All in all, the proportionality principle in both Articles might serve as a guideline to facilitate the interpretation of TRIPS in a more balanced way.

3.3 Empowering Function

As already mentioned, Articles 7 and 8 differ considerably in their nature. Article 7 and, partly, Article 8(1) have an interpretative function. The main feature of Article 8, however, is the strong statement that under certain conditions member states may adopt certain measures. By allowing member states to take specific actions, it has an empowering, and potentially corrective, function.⁸²

Article 8(1) deals with measures for protecting public health and nutrition and promoting the public interest in certain sectors of vital importance to the state. Article 8(2) allows member states to take action against the abuse of intellectual property rights or practices that unreasonably restrain trade or adversely affect the international transfer of technology.

Because all these measures need to be consistent with the provisions of the TRIPS Agreement, some authors conclude that Article 8 represents a mere policy statement and only has interpretative function. 83 The argument is similar to the above-mentioned position of a narrow interpretative function of Article 7—the whole TRIPS Agreement should not be renegotiated in light of a single provision such as Article 8, because there are specific limitations mentioned with each intellectual property right. Nevertheless, it can be cogently argued that Article 8 is indeed much more than a policy statement.

First, the genesis of the provision can be traced back to the "Anell Draft", ⁸⁴ which preceded the Brussels and Dunkel Drafts, and which mentions under 8B.4 that "[e]ach Party will take the measures it deems appropriate with a view to preventing the abuse of intellectual property rights". ⁸⁵ This initiative follows a proposal by the developing countries and reflects their interests, whereas the developed countries had a stronger influence on the preamble. ⁸⁶ Second, from a contextual point of view the separate provisions in the preamble and Article 8 show

⁸² O. Brand (2012), Commentary on Article 8 TRIPS, in J. Busche, P. Stoll & A. Wiebe (Eds.), TRIPs: Internationales und europäisches Recht des geistigen Eigentums, pp. 187, 189.

⁸³ D. Gervais (2012), The TRIPS Agreement: Drafting History and Analysis, Art. 7 para. 2.123; P. Yu (2010), The Objectives and Principles of the TRIPS Agreement, in C. Correa (Ed.), Research Handbook on the Protection of Intellectual Property under WTO Rules – Intellectual Property in the WTO Volume I, pp. 146, 168–169.

⁸⁴ D. Gervais (2005), Intellectual Property, Trade & Development: The State of Play, 74 Fordham L. Rev. 2005, 505, 507-508 (explaining the genesis of Articles 7 and 8).

 $^{^{85}}$ Chairman's report to the Group of Negotiations on Goods, MTN.GNG/NG11/W/76 of 23 July 1990, p. 7.

⁸⁶ UNCTAD-ICTSD (2005), Resource Book on TRIPS and Development, p. 124.

that they are different in *substance*, not in degree. The strong emphasis on Articles 7 and 8 in the Doha Ministerial Declaration supports this view as well. Finally, the wording of Article 8 indicates that it is more than a policy statement because it clearly speaks of the possibility to "adopt measures" and though there is the proviso that those measures "must be consistent with the agreement", they do not refer directly to any specific provision. Article 8 certainly is vague in regard to the substance but clear in regard to the goals, e.g. to avoid abuses of intellectual property, restraint of trade or adverse effects on technology transfer. Thus it can be applied to achieve its goal and is not only a declaratory statement. 88 For instance, Article 8(2) serves as a general clause against the abuse of intellectual property rights and has a broad meaning similar to Article 5A Paris Convention. 89 Comparing the exact wording of Article 8(2) with Article 40(2), which deals with anticompetitive abuses, it becomes clear that they have a different scope. 90 Article 40 (2) speaks of "abuses of intellectual property rights having an adverse effect on competition in the relevant market". That clearly has a narrower scope than the "abuse of intellectual property rights" as a stand-alone problem mentioned in Article 8(2). This allows certain practices, such as the domestic non-working of a patent, to be discussed in a different light.⁹¹

Therefore, Article 8 should be interpreted as allowing ad-hoc limitations under the appropriate circumstances. 92 One might even argue that individual decisions based on Article 8 may conflict with particular provisions in the TRIPS Agreement. However, as long as the overall consistency with the Agreement as a whole is given, the measures should be allowed. 93 This latter approach could go a bit too far if it is

⁸⁷ The repetition of "adopting measures" was omitted in Article 8(2) for reasons of style only; see A. Heinemann (1995), Das Kartellrecht des geistigen Eigentums im TRIPS-Übereinkommen der Welthandelsorganisation, 54 GRUR Int. 1995, 535, 536.

⁸⁸ O. Brand (2012), Commentary on Article 8 TRIPS, in J. Busche, P. Stoll & A. Wiebe (Eds.), TRIPs: Internationales und europäisches Recht des geistigen Eigentums, pp. 187, 191.

⁸⁹ E. Fox (1996), Trade, Competition, and Intellectual Property – TRIPS and its Antitrust Counterparts, 29 Vand. J. Transnat'l L. 1996, 481, 482-483; D. Gervais (2012), The TRIPS Agreement: Drafting History and Analysis, Art. 8 para. 2.125; H. Ullrich (2004), Expansionist Intellectual Property Protection and Reductionist Competition Rules: A TRIPS Perspective, 7 J. Int'l Econ. L. 2004, 401, 414; also see A. Heinemann (1995), Das Kartellrecht des geistigen Eigentums im TRIPS-Übereinkommen der Welthandelsorganisation, 54 GRUR Int. 1995, 535, 537 (arguing that Art. 8(2) contains some aspects of the US misuse doctrine as well).

⁹⁰ O. Brand (2012), Commentary on Article 8 TRIPS, in J. Busche, P. Stoll & A. Wiebe (Eds.), TRIPs: Internationales und europäisches Recht des geistigen Eigentums, pp. 187, 201.

⁹¹ For general competition policy in TRIPS see, M. Bakhoum & B. Conde Gallego (2015), TRIPS and Competition Rules: From Transfer of Technology to Innovation Policy, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 529 (this volume).

⁹² J.H. Reichman (1997), From Free Riders to Fair Followers: Global Competition under the TRIPS Agreement, 29 N.Y.U. J. Int'l L. & Pol. 1997, 11, 35.

⁹³ C. Smith (2000), Patenting Life: The Potential and the Pitfalls of Using the WTO to Globalize Intellectual Property Rights, 26 N.C.J. Int'l L. & Com. Reg. 2000, 143, 159.

not limited to the most extreme cases. Another approach might be to simply focus on the fact that a wide range of public policy measures might change the balance of concessions in the TRIPS Agreement. Again, this reading shows the limiting effect of a proportionality principle on intellectual property rights. At the same time, however, it makes clear that these measures are only possible if they respect the proportionality principle itself by weighing carefully the public interests, such as public health or the prevention of abusive use of intellectual property rights, against the legitimate expectations of right holders. The proportionality principle thus empowers the states to take different interests into consideration.

3.4 Bundle of Functions

Articles 7 and 8, construed in the above-mentioned manner, have two main functions; an interpretative and an empowering function, with Article 8 promoting both, whereas Article 7 is only concerned with an interpretative function. Building on these two core functions, it has been argued that there are a total of five uses 95: The "guiding light" use, based on the interpretative function, and the "shield and sword" and "bridge and seed" uses, based on the empowering function. The "guiding light" use is meant to give the dispute panel and Appellate Body objective clues for interpreting the ambiguous provisions in TRIPS that reflect hard-fought compromises. Seeing the provisions as a "shield" means basically that they can be invoked for protecting existing limitations in the Agreement as well as aggressive demands for an expansion beyond TRIPS. In contrast, the use of the provisions as a "sword" implies a more proactive curtailment of existing intellectual property rights under certain circumstances, such as a health crisis or an abuse of intellectual property rights. Thus wielded, the provisions could challenge an overall lack of balance, leading to a more pronounced system of intellectual property "ceilings", mandatory limitations or maximum rights that are already included in TRIPS and should refer to Articles 7 and 8 for further interpretation. 96 This might entail binding maximum standards which could prevent the problem of ever-stronger intellectual property protection and reduced flexibility driven by bilateral trade agreements. The use of the provisions as a "bridge" or a "seed" points beyond

 $^{^{94}}$ C. Correa (2007), Trade Related Aspects of Intellectual Property Rights – a Commentary on the TRIPS Agreement, p. 108.

⁹⁵ P. Yu (2010), The Objectives and Principles of the TRIPS Agreement, in C. Correa (Ed.) Research Handbook on the Protection of Intellectual Property under WTO Rules – Intellectual Property in the WTO Volume I, pp. 146, 169–191.

⁹⁶ H. Grosse Ruse-Khan & A. Kur (2008), Enough is Enough – The Notion of Binding Ceilings in International Intellectual Property Protection, Max Planck Institute for Intellectual Property, Competition and Tax Law Research Paper Series No. 09–01, pp. 45, 68.

TRIPS, because this connects TRIPS with other international regimes of different subject matter, such as the Convention on Biological Diversity. Furthermore, it might point beyond the current intellectual property regime and spur future developments of an international intellectual property system.

Though all these uses are correctly identified, they remain a loose bundle. The proportionality principle has the potential to link all the different functions and include the interests of all parties involved. By understanding the bundle of functions in Articles 7 and 8 as an expression of the proportionality principle, we can see how this principle spurred the careful yet vague use of terms such as "appropriate" or "balance". At the same time the principle serves as a "comprehensive principle" that influences the interpretation and application of the Articles. To explain this I refer again to the notion of seeing TRIPS through a neofederalist lens. 98 There are convincing reasons for interpreting Articles 7 and 8(1) as granting the member states rather extensive flexibilities to adjust norms of TRIPS according to their particular needs. The significant differences between the member states in economic, social and overall development status warrant a more careful handling of interpretive issues. This does not imply that minimum standards are sacrificed but that the factors mentioned in Articles 7 and 8(1) need to be observed in the application of the text. Indeed, intellectual property rights do not exist in a vacuum. 99 They should contribute to "the promotion of technological innovation", the "dissemination of technology", "the mutual advantage of producers and users", "social and economic welfare", and a "balance [of] rights and obligations". Given that social and economic welfare is specified in Article 8(1) as "protection of public health and nutrition" and gives member states the possibility to adopt measures to promote those interests, it seems a feasible approach to grant the member states more flexibilities through those norms.

On the other hand, it should not be forgotten that this can only be one side of the coin, because Article 7 speaks of a "balance of rights and obligations". Therefore, the principle of proportionality becomes important as a countervailing force, which is also expressed in Article 8(1), which provides that the "measures adopted must be necessary". Though "necessity of measures" and "proportionality of measures" are not identical, a broad understanding of a proportionality principle can entail both of those features. ¹⁰⁰ This indicates that the goal and means for reaching that goal must not be out of proportion. In sum, both parties, i.e. right holders and users of intellectual property, have more to gain than to lose if the specific design of the rights is tailored to the needs of the countries *and* according to the minimum

⁹⁷ Doha Ministerial Declaration, WTO Doc. WT/MIN(01)/DEC/1 of 14 Nov. 2001, para. 19.

 $^{^{98}}$ G. Dinwoodie & R. Dreyfuss (2012), A Neofederalist Vision of TRIPS – The Resilience of the International Intellectual Property Regime.

⁹⁹ Submission to the Council of TRIPS by the African Group, Barbados, Bolivia, Brazil, Dominican Republic, Ecuador, Honduras, India, Indonesia, Jamaica, Pakistan, Paraguay, Philippines, Peru, Sri Lanka, Thailand, and Venezuela, IP/C/W/296 of 19 June 2001.

¹⁰⁰ This will be explained in Sect. 4.3.

standards and the objectives provided by TRIPS. The proportionality principle is intended to function as a "comprehensive principle" for applying Articles 7 and 8 more proactively. In the long run it would also be plausible to accept the proportionality principle as part of an "intellectual property acquis". This claim is supported in the following by elaborating the different facets of a proportionality principle that are already discussed in intellectual property law.

4 Facets of a Proportionality Principle in Intellectual Property

4.1 Proportionality as a "Midlevel Principle"

Proportionality is sometimes seen as a "midlevel principle" in intellectual property theory, ¹⁰² so called because it forms a middle layer connecting the normative foundations and different theories of justification of intellectual property rights with the specific doctrines, rules and institutions in the field. This notion builds on Coleman's idea of "corrective justice as a midlevel between tort law and the principle of fairness". 103 Besides the proportionality principle, Merges identifies three other "midlevel principles" in intellectual property law, namely the principles of "efficiency", "non-removal" and "dignity". 104 These serve to provide a common ground for the discourse on intellectual property rights as well, but they are independent in their meaning, so the focus here shall remain on the proportionality principle. Not only does it tie together different justification theories and practical doctrines in intellectual property, it also pervades the design of intellectual property rights concerning their subject matter, limits and remedies for infringements. 105 For instance, the "inventive step" requirement in patent law means that inventions are only patentable if they represent a nontrivial advance beyond those already existing. The technical contribution must thus be proportional to the legal right at stake. ¹⁰⁶ In US copyright law, the fair use doctrine is heavily influenced by the proportionality principle and in the field of remedies, the recent shift away from "automatic" injunctions in cases of intellectual property infringements shows a strong consideration for the proportionality principle. 107 The common idea in all those cases is that intellectual property rights should not grant their owners

¹⁰¹ The term is borrowed from G. Dinwoodie & R. Dreyfuss (2012), A Neofederalist Vision of TRIPS – The Resilience of the International Intellectual Property Regime, pp. 175–203.

¹⁰² R. Merges (2011), Justifying Intellectual Property, pp. 139, 159–191.

¹⁰³ J. Coleman (2001), The Practice of Principle, p. 54.

¹⁰⁴ R. Merges (2011), Justifying Intellectual Property, pp. 150–158.

¹⁰⁵ Ibid., p. 160.

¹⁰⁶R. Merges (2011), Justifying Intellectual Property, p. 161.

¹⁰⁷ Ibid.

disproportionate reward—it serves as a safeguard against "excessive" or "disproportional" leverage of the right holder.

This might occur, for instance, if a patent only covers a small fraction of a complex product, because this patent's owner could hold up the production of the whole product, especially if switching costs are too high later on in the production process. ¹⁰⁸ Others problems might be, for instance, poor patent quality that allows patent holders to extract excessive rents out of questionable patents ¹⁰⁹ or the advent of patent assertion companies, frequently labeled patent trolls. ¹¹⁰ The patent troll problem was addressed in the U.S. Supreme Court decision *eBay*, *Inc. v. MercExchange*, *L.L.C.* ¹¹¹

This case's setting is the information technology industry. It deals with a specific online auction mechanism that is protected by a patent owned by MercExchange, which tried to enforce this patent and obtain an injunction against eBay. The Supreme Court ruled that the so called "four-factor test" from equity law also applies in patent cases and must be performed before issuing an injunction—primarily, a ruling against the practice of the aforementioned patent trolls but with a universal scope, as the test is a general rule. The four factors require a plaintiff seeking an injunction to demonstrate:

- (1) that it has suffered an irreparable injury;
- (2) that remedies available at law are inadequate to compensate for that injury;
- (3) that considering the balance of hardships between the plaintiff and defendant, a remedy in equity is warranted; and
- (4) that the public interest would not be disserved by a permanent injunction.

Though not mentioning the word "proportionality" explicitly, the third and fourth factor link the scope of the right (i.e. essentially a choice between a property and a liability rule¹¹³) to the balance of hardship between the plaintiff and the defendant, as well as the interest of the public. In general, the comparison between

¹⁰⁸ M. Lemley & C. Shapiro (2007), Patent Holdup and Royalty Stacking, 85 Tex. L. Rev. 2007, 1991 (explaining that royalty stacking, i.e. when multiple patents cover a single product, could exacerbate the situation); R. Merges (2011), Justifying Intellectual Property, pp. 161–162, 166.

¹⁰⁹ R. Hilty (2009), The Role of Patent Quality in Europe, in J. Drexl et al. (Eds.), Technology and Competition/Technologie et Concurrence – Contributions in Honour of/Mélanges en l'honneur de Hanns Ullrich, pp. 91–121.

 ¹¹⁰ C. Chien (2014), Startups and Patent Trolls, 17 Stan. Tech. L. Rev. 2014, 461; M. Lemley & A. Melamed (2013), Missing the Forest for the Trolls, 113 Colum. L. Rev. 2014, 2117.

¹¹¹ eBay, Inc. v. MercExchange, L.L.C., 126 S. Ct. 1837 (2006).

¹¹² See R. Merges (2006), Introductory Note to Brief of Amicus Curiae in eBay v. MercExchange, 21 Berkeley Tech. L.J. 2006, 997.

¹¹³ G. Calabresi & D. Melamed (1972), Property Rules, Liability Rules, and Inalienability: One View from the Cathedral, 85 Harv. L. Rev. 1972, 1089; M. Lemley & P. Weiser (2007), Should Property or Liability Rules Govern Information, 85 Tex. L. Rev. 2007, 783, 784; R. Merges (1994), Of Property Rules, Coase, and Intellectual Property, 94 Colum. L. Rev. 1994, 2655.

two different situations guided by the idea of temperance and the weighing of interests is typical of a proportionality test.¹¹⁴ The reason for this is, as mentioned above, that the word "proportional" points at two "things" that are related in a certain way.

A common argument in the field of intellectual property rights is that things can easily get out of proportion, especially in cases of pure rent-seeking or when the contribution of the intellectual property right owner is not the reason for the economic leverage the right grants. Of course, one has to keep in mind that every right that grants exclusivity to its owner creates some form of leverage. However, it makes a huge difference whether one accepts all types of leverage or whether one allows scrutiny of the circumstances that created the leverage. If one construes the proportionality principle as a safeguard against excessive leverage of right holders, Articles 7 and 8 as expressions of this principle should influence the reading of Article 44(1) concerning injunctive relief. This would make member states far more inclined to implement proportionality requirements for injunctive relief in their national intellectual property laws.

4.2 Proportionality Principle Derived from WTO Law

The proportionality principle for intellectual property could also be derived from WTO law. It is argued that the WTO is not mature enough for a proportionality principle and lacks the proper institutional design for it. One could, however, point out that WTO law has many provisions that include the idea of a proportionality principle in the form of a "necessity test"—a test that might be seen as a part of a more comprehensive proportionality principle. Such "necessity test" is found in the general exceptions in Article XX GATT and also Article 2(1) and (2) General Agreements on Trade in Services, on Sanitary and Phytosanitary Measures and Article 2(2) Agreement on Technical Barriers to Trade. This means that the balancing of interests can take place either on the WTO level through panel decisions or on the member state level. For the WTO level it is either a mode of interpretation of the provisions or a specific obligation for the member states that need to balance certain interests. 118 Even though, for instance, Article XX GATT sets forth in a general provision that measures taken need to be weighed against

¹¹⁴ M. Stürner (2010), Der Grundsatz der Verhältnismäßigkeit im Schuldvertragsrecht, pp. 12, 39.

¹¹⁵ R. Merges (2011), Justifying Intellectual Property, pp. 167–169.

¹¹⁶ A. Desmedt (2001), Proportionality in WTO Law, 4 J. Int'l Econ. L. 2001, 441–480.

¹¹⁷ M. Andenas & S. Zleptnig (2007), Proportionality and Balancing in WTO Law: a Comparative Perspective, 20 Cambridge Rev. of Int'l Affairs 2007, 71, 75.

¹¹⁸ M. Andenas & S. Zleptnig (2007), Proportionality and Balancing in WTO Law: a Comparative Perspective, 20 Cambridge Rev. of Int'l Affairs 2007, 71, 89.

their detrimental impact upon fundamental standards, ¹¹⁹ including a "necessity requirement", the WTO case law leaves some room for interpreting the requirement as a proportionality test in the form of a three-tier procedure that checks the (1) suitability, (2) necessity and (3) proportionality *stricto sensu* of the measures at issue. ¹²⁰ Also, the Appellate Body ruled in regard to Article XX GATT that three factors should be taken into account when evaluating the proportionality of a measure: (1) the contribution made by the measure at stake to the legal goal aspired to by the law or regulation at issue; (2) the importance of the common interest or values protected by that law or regulation, and (3) the ensuing impact of the law or regulation on the protected interests in free trade. ¹²¹ This clearly shows that an idea of proportionality is present in the WTO law, at least in Article XX GATT.

Some apply this in regard to the TRIPS Agreement, as it is a part of the WTO rules, and give the factors a new meaning in regard to the "three-step test": (1) the appropriateness of the limitation for achieving its purpose; (2) the importance of the policy concerns pursued thereby; and (3) the impact it produces on the interests of right holders need to be weighed and balanced against each other. 122 The interpretation of the three-step test is thus conducted in the light of a proportionality principle. It is part of a more nuanced interpretation approach that includes an increased awareness of the objects and principles set forth in TRIPS as well as a rejection of mere property logic. 123 This contributes to a more balanced interpretation of both the "three-step test" and the patent system as a whole, which has been promulgated in declarations by the Max Planck Institute for Innovation and Competition. 124 For instance, a correct reading of the "three-step test" would construe the three conditions within the test as non-cumulative. The proportionality principle increases the awareness of the importance of a comprehensive overall assessment of the three factors because it entails a weighing of interests and trade-offs between different positions and requirements, in contrast to a rigid all-or-nothing approach.

¹¹⁹G. Westkamp (2005), Convergence of Intellectual Property Rights and the Establishment of "Hybrid" Protection under TRIPS, in F. Macmillan (Ed.), New Directions in Copyright: Volume 1, pp. 108, 126.

¹²⁰ M. Andenas & S. Zleptnig (2007), Proportionality and Balancing in WTO Law: A Comparative Perspective, 20 Cambridge Rev. of Int'l Affairs 2007, 71, 78-82, 89. The authors define the proportionality test *stricto sensu* as analysing "whether effects of a measure are not disproportionate or excessive in relation to the interests affected. . . . The more intense the restriction of a particular interest, the more important the justification for the countervailing interest needs to be" (at 76).

¹²¹ Appellate Body Report, Korea – Measures Affecting Imports of Fresh, Chilled and Frozen Beef, WT/DS161/AB/R, adopted 10 January 2001, para. 164.

 $^{^{122}}$ A. Kur (2009), Of Oceans, Islands, and Inland Water – How Much Room for Exceptions and Limitations under the Three-Step Test?, 8 Rich. J. Global L. & Bus. 2009, 287, 338–339.

¹²⁴ D. 1.

¹²⁴ Declaration on Patent Protection: Regulatory Sovereignty under TRIPS (Version 1.0 of 15 April 2014), published in 45 IIC 2014, 679; Ch. Geiger, J. Griffiths & R. Hilty (2008), Declaration: A Balanced Interpretation of the "Three-Step Test" in Copyright Law, 39 IIC 2008, 707.

Also, one could make use of a proportionality test to balance national and global interests in regard to the creation of new "hybrid intellectual property rights". Those hybrid rights are intended to protect a certain investment rather than "genuine creativity or inventiveness" and are closely linked to the advent of the information society with new subject matter such as databases or software. The proportionality test could potentially draw on Article 2(2) Agreement on Technical Barriers to Trade or, again, on Articles XI and XX(d) GATT. The former pertains to a general prohibition on introducing legislation that presents unnecessary barriers to international trade. It, as some argue, the possibility to deviate from GATT provisions is limited, Article 2(2) Technical Barriers to Trade promises more flexibility in establishing a proportionality test for introducing new types of intellectual property rights. For the sake of clarifying the boundaries of these rights and their subject matter it has been proposed that a new "balancing provision" be introduced into TRIPS that might be used whenever new intellectual property rights are created. 128

Summing up, WTO law can be construed as containing a proportionality principle though its exact form is still in the process of being established. The context in which it might be used is diverse and includes for example the interpretation of the "three-step test" or the creation of a balancing counterforce against the introduction of new intellectual property rights.

4.3 Proportionality Principle and Human Rights

Finally, the proportionality principle is also introduced into the intellectual property debate from a constitutional law stance. This is a classic setting in which the principle is used to limit state actions that infringe on human rights. So the principle offers a possibility to include human rights in the intellectual property arena. If one frames the tension between the intellectual property right owner and the public's right to access information in constitutional terms, one might resort first to limitations to mitigate the tension and second to such limitations as are dictated by human rights. The concept of proportionality in German constitutional law has therefore also been applied to specific intellectual property situations. The German Federal

¹²⁵ G. Westkamp (2005), Convergence of Intellectual Property Rights and the Establishment of "Hybrid" Protection under TRIPS, in F. Macmillan (Ed.), New Directions in Copyright: Volume 1, pp. 108, 115–117.

¹²⁶ W. Weiß, C. Herrmann & C. Ohler (2003), Welthandelsrecht, p. 222.

¹²⁷G. Westkamp (2005), Convergence of Intellectual Property Rights and the Establishment of "Hybrid" Protection under TRIPS, in F. Macmillan (Ed.), New Directions in Copyright: Volume 1, pp. 108, 126.

¹²⁸ Ibid., pp. 108, 130.

¹²⁹ C. Geiger & E. Izyumenko (2014), Copyright on the Human Rights' Trial: Redefining the Boundaries of Exclusivity Through Freedom of Expression, 45 IIC 2014, 316; C. Geiger (2007), Author's Right, Copyright and the Public's Right to Information: A Complex Relationship

Constitutional Court rendered a judgment in which it expanded the standard limitation of the freedom of quotation in certain circumstances of artistic use. 130 Thus, artistic freedom prevails, and yet the different concerns of copyright holders and artists using the copyrighted work must be scrutinized with a proportionality test. The same reasoning applies e.g. for cases of trademark parody. ¹³¹ The German Federal Constitutional Court also argued that the proportionality principle follows from the very nature of constitutional rights, i.e. especially human rights (couched in the terms of fundamental rights). 132 The proportionality principle in this context entails three sub-tests of "suitability", "necessity" and "proportionality in its narrow sense". It is used as a test to determine whether a certain state action that limits a human right is permissible. The state action must be "suitable", i.e. must be capable of achieving the goal wished, it must be "necessary", i.e. the least restrictive means of doing so, and finally it must be "proportional in the narrow sense", i.e. must be iustified given the costs to the rights in question. 133 If it passes all three of these subtests, the state action limiting a human right is said to be proportional. Recently, the idea of an external limitation of intellectual property rights by human rights has also been applied on a European level. The European Court of Human Rights rendered iudgments—the Ashby Donald¹³⁴ and Pirate Bay¹³⁵ decisions—in which it considers the freedom of expression as a balancing factor to limit intellectual property rights in a proportional manner. This approach is based on the clear principle that intellectual property rights are not an end in themselves but need justification and a proportional arrangement. ¹³⁶ Ultimately, a proportionality principle might be incorporated into intellectual property by internalizing the debate about human rights and converting mere limitations of intellectual property rights into specific "rights". 137

(Rethinking Copyright in the Light of Fundamental Rights), in F. Macmillan (Ed.), New Directions in Copyright Law: Volume 5, pp. 24, 36, 43.

¹³⁰ German Federal Constitutional Court (Bundesverfassungsgericht) of 29 June 2000, "Germania 3", Case No. 1 BvR 825/98, see GRUR 2001, 149.

¹³¹German Federal Supreme Court (Bundesgerichtshof) of 3 February 2005, "Violet Postcard" (Lila-Postkarte), Case No. I ZR 159/02, see 38 IIC 2007, 119.

¹³² German Federal Constitutional Court (Bundesverfassungsgericht) of 15 December 1983, "Volkszählung", Case No. 1 BvR 209, 269, 362, 420, 440, 484/83, see BVerfGE 65, 1, para. 157.

¹³³ J. Rivers (2010), A Theory of Constitutional Rights and the British Constitution, in R. Alexy, A Theory of Constitutional Rights, p. xxxi.

 $^{^{134}\,\}rm European$ Court of Human Rights of 10 January 2013, Ashby Donald and Others v. France, Case No. 36769/08, see 45 IIC 2014, 354.

¹³⁵ European Court of Human Rights of 19 February 2013, Neij and Sunde Kolmisoppi v. Sweden, Case No. 40397/12, see 44 IIC 2013, 724.

¹³⁶ A. Peukert (2011), Intellectual Property as an End in Itself?, 33 EIPR 2011, 67.

¹³⁷ C. Geiger (2007), Author's Right, Copyright and the Public's Right to Information: A Complex Relationship (Rethinking Copyright in the Light of Fundamental Rights), in F. Macmillan (Ed.), New Directions in Copyright Law: Volume 5, pp. 24, 43; L. Helfer (2003), Human Rights and Intellectual Property: Conflict or Coexistence?, 5 Minn. Intell. Prop. Rev. 2003, 47, 58.

However, this specific version of the proportionality principle is not immediately applicable to TRIPS, as the Agreement is not directly concerned with a safeguard for individuals against state action. It rather sets the framework for a member state in regard to the design of an intellectual property regime. This means that the context in which the proportionality principle in TRIPS works is different from the human rights setting. Having said this, it is still possible to make use of the abovementioned three subtests for TRIPS, because, as has been cogently argued, the proportionality principle is a logical necessity of how some specific legal norms are construed. ¹³⁸

If one distinguishes categorically between general standards ¹³⁹ and clear-cut rules as two distinct modes for designing legal provisions, one can discern an immanent connection between standards and the proportionality principle. The latter can be derived from the nature of standards. Standards are so to speak "optimization requirements relative to what is legally and factually possible". 140 This means that the vague wording of standards allows for a balancing of different interests, when two competing standards are concerned. This is not only true in the case of human rights but of course for every other standard as well. As we have seen, the two most important provisions in the form of standards in TRIPS are Articles 7 and 8. In fact, one can discern multiple standards within the provisions, e.g. the first standard of Article 7 is that "the protection and enforcement of intellectual property rights should contribute to the promotion of technological innovation", and—as a second standard—should also promote the transfer and dissemination of technology. Therefore, one could argue that the proportionality principle serves as a test for whether a certain design of national intellectual property law is permissible under TRIPS when two conflicting standards are at stake. The compliance of national intellectual property laws with TRIPS is thus not only a question of whether minimum standards are met but also a question of whether a "maximum standard" or "ceiling" is observed—the national laws could be tested for being suitable, necessary and proportional in the narrower sense in regard to possible conflicting standards in Articles 7 and 8 TRIPS.

5 Conclusion

There is no explicit proportionality test to be found in the wording of the TRIPS Agreement. However, a closer reading of Articles 7 and 8 reveals that both provisions are intended to be read in the light of the principle of proportionality. The terms used in both provisions and their genesis indicate that the idea of

¹³⁸ R. Alexy (2009), A Theory of Constitutional Rights, pp. 66–69.

¹³⁹ This term is used instead of "principles", as used by Alexy, because otherwise it might be confused with the main topic of the article, which is in fact the proportionality principle.

¹⁴⁰R. Alexy (2009), A Theory of Constitutional Rights, p. 67.

proportionality pervades their whole normative content. This is supported by the provisions' interpretative and empowering functions. If both norms were used as a "guiding light" by the Dispute Panel and Appellate Body in the future, the proportionality principle could slowly develop into an important doctrine within TRIPS. As the brief overview concerning the different facets of the proportionality principle has shown, there are different ways of interpreting such a proportionality principle. It could be applied in quite a theoretical manner as a "midlevel principle" for intellectual property in general but also find its way into national laws as a concrete test of whether injunctive relief should be granted to a right holder. Each country should therefore be able to introduce a specific proportionality test before granting injunctions. 141 This is in line with TRIPS, as Article 44(1) provides that "judicial authorities shall have the authority to order a party to desist from an infringement." Yet at the same time Article 44(2) provides that "[m]embers may limit the remedies available against such use to payment of remuneration in accordance with subparagraph (h) of Article 31."142 On the one hand, this reduces the exclusivity of intellectual property and thus transforms the property-rule protection into a liability rule in certain cases. But on the other hand, it generates remuneration for the intellectual property owner and enables access to the information in cases where a right holder exercises disproportionate leverage through a property rule. What "patent trolls" and their "innovation tax" for small companies and start-ups are for the US economy, ¹⁴³ might be some "bad actors" that are artificially extending patents through "ever-greening strategies" in developing countries, such as was found in the recent ruling of the Indian Supreme Court. 144

Reading Articles 7 and 8 as an expression of a proportionality principle brings member states considerable flexibility in designing their intellectual property regimes. It allows them to balance all interests mentioned in the provisions against each other and it serves as a tool for construing the open-ended standards of TRIPS. It might also be used to determine whether a certain national intellectual property law provision is in compliance with TRIPS's standards as set forth in Articles 7 and 8. In the same vein the "three-step test" in TRIPS should be construed in the light of the proportionality principle. This increases the discretion for member states to tailor limitations according to their specific needs. Given the

¹⁴¹ J. Sarnoff (2010), Lessons from the United States in Regard to the Recent, more flexible Application of Injunctive Relief, in C. Correa (Ed.), Research Handbook on the Interpretation and Enforcement of Intellectual Property under WTO Rules – Intellectual Property in the WTO Volume II, pp. 48, 78.

¹⁴² C. Cotropia (2009), Compulsory Licensing under TRIPS and the Supreme Court of the United States' Decision in eBay v. MercExchange, in T. Takenaka (Ed.), Patent Law and Theory, p. 557. ¹⁴³ C. Chien (2014), Startups and Patent Trolls, 17 Stan, Tech. L. Rev. 2014, 461.

¹⁴⁴ Novartis AG v. Unions of India & Others, Supreme Court of India, CIVIL APPEAL Nos. 2706-2716 (2013).

¹⁴⁵ H. Grosse Ruse-Khan (2008), Proportionality and Balancing within the Objectives for Intellectual Property Protection, in P.L.C. Torremans (Ed.), Intellectual Property and Human Rights – Enhanced Edition of Copyright and Human Rights, pp. 161, 189.

fact that different countries face different problems in regard to intellectual property, it seems more promising to mitigate those with a proportionality principle rather than using a rigid "one size *always* fits all" approach.

Furthermore, the proportionality principle would promote a common ground in intellectual property law. As mentioned above, an overlapping consensus between different stakeholders despite their conflicting underlying beliefs concerning intellectual property is required more than ever. The proportionality principle can serve as one part of such an overlapping consensus. The effect of the acceptance of the principle is bi-directional. On the one hand, it may serve as a limiting factor that mitigates stark disproportional effects in special circumstances. The signatory states may indeed use the flexibility of a proportionality principle to adjust the intellectual property system according to the factors laid down in Articles 7 and 8. On the other hand, the proportionality principle also works in the other direction, so that right holders are not exposed to a constant limitation of their rights, even in cases where there is no imbalance of interests or excessive leverage. This overlapping consensus would ultimately lead to a more balanced design and enforcement of intellectual property rights because the proportionality principle emphasizes strongly the relation between the different parties. It thus slightly realigns the focus from a discourse of pure rights in intangible assets to a more nuanced discussion including the implications of the rights for all actors on the international stage.

References

- Alexy, R. (2009), A Theory of Constitutional Rights, Oxford: Oxford University Press
- Andenas, M. & Zleptnig, S. (2007), Proportionality and Balancing in WTO Law: A Comparative Perspective, 20 Cambridge Rev. of Int'l Affairs 2007, 71, London: Routledge
- Bakhoum, M. & Conde Gallego, B. (2015), TRIPS and Competition Rules: From Transfer of Technology to Innovation Policy, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles (p. 529), Heidelberg: Springer (this volume)
- Beatty, D. (2004), The Ultimate Rule of Law, Oxford: Oxford University Press
- Bongiovanni, G. & Valentini, C. (2009), Reciprocity, Balancing and Proportionality: Rawls and Habermas on Moral and Political Reasonableness, in G. Bongiovanni, G. Sartor & C. Valentini (Eds.), Reasonableness and Law, New York: Springer
- Brand, O. (2012), Commentary on Article 8 TRIPS, in J. Busche, P. Stoll & A. Wiebe (Eds.), TRIPs: Internationales und europäisches Recht des geistigen Eigentums, Cologne: Carl Heymanns Verlag
- Calabresi, G. & Melamed, D. (1972), Property Rules, Liability Rules, and Inalienability: One View from the Cathedral, 85 Harv. L. Rev. 1972, 1089, Cambridge: Harvard University School of Law
- Charnovitz, S. (2002), The Legal Status of the Doha Declaration, 5 J. Int'l Econ. L. 2002, 191, Oxford: Oxford University Press
- Cheng, B. (1953), General Principles of Law as applied by International Courts and Tribunals, Cambridge: Cambridge University Press

- Chien, C. (2014), Startups and Patent Trolls, 17 Stan. Tech. L. Rev. 2014, 461, Stanford: Stanford Law School
- Coleman, J. (2001), The Practice of Principle, Oxford: Oxford University Press
- Conde Gallego, B. (2010), Intellectual Property Rights and Competition Policy, in C.M. Correa (Ed.), Research Handbook on the Protection of Intellectual Property under WTO Rules, Intellectual Property in the WTO, Volume 1, Cheltenham: Edward Elgar
- Cornish, W. & Liddell, K. (2015), The Origins and Structure of the TRIPS Agreement, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles (p. 3), Heidelberg: Springer (this volume)
- Correa, C. (2007), Trade Related Aspects of Intellectual Property Rights A Commentary on the TRIPS Agreement, Oxford: Oxford University Press
- Cotropia, C. (2009), Compulsory Licensing under TRIPS and the Supreme Court of the United States' Decision in eBay v. MercExchange, in T. Takenaka (Ed.), Patent Law and Theory, Cheltenham: Edward Elgar
- Desmedt, A. (2001), Proportionality in WTO Law, 4 J. Int'l Econ. L. 2001, 441, Oxford: Oxford University Press
- Declaration on Patent Protection: Regulatory Sovereignty under TRIPS (Version 1.0 of 15 April 2014), published in 45 IIC 2014, 679, available at: http://www.ip.mpg.de/en/news/declaration_on_patent_protection.html (accessed 20 May 2015)
- Dinwoodie, G. & Dreyfuss, R. (2012), A Neofederalist Vision of TRIPS The Resilience of the International Intellectual Property Regime, Oxford: Oxford University Press
- Dworkin, R. (1967), The Model of Rules, 35 U. Chi. L. Rev. 1967, 14, Chicago, IL: University of Chicago Law School
- Engle, E. (2013), The General Principle of Proportionality and Aristotle, in L. Huppes-Cluysenaer & N.M.M.S. Coelho (Eds.), Aristotle and the Philosophy of Law: Theory, Practice and Justice, New York: Springer
- Epstein, R. (2010), The Disintegration of Intellectual Property?: A Classical Liberal Response to a Premature Obituary, 62 Stan. L. Rev. 2010, 455, Stanford: Stanford Law School
- Fox, E. (1996), Trade, Competition, and Intellectual Property TRIPS and its Antitrust Counterparts, 29 Vand. J. Transnat'l L. 1996, 481, Tennessee: Vanderbilt University Law School
- Geiger, C. & Izyumenko, E. (2014), Copyright on the Human Rights' Trial: Redefining the Boundaries of Exclusivity Through Freedom of Expression, 45 IIC 2014, 316, Munich/Berlin: C.H. Beck/Springer
- Geiger, C. (2007), Author's Right, Copyright and the Public's Right to Information: A Complex Relationship (Rethinking Copyright in the Light of Fundamental Rights), in F. Macmillan (Ed.), New Directions in Copyright Law: Volume 5, Cheltenham: Edward Elgar
- Gervais, D. (2005), Intellectual Property, Trade & Development: The State of Play, 74 Fordham L. Rev. 2005, 505, New York: Fordham University School of Law
- Gervais, D. (2012), The TRIPS Agreement: Drafting History and Analysis, London: Sweet & Maxwell
- Grosse Ruse-Khan, H. & Kur, A. (2008), Enough is Enough The Notion of Binding Ceilings in International Intellectual Property Protection, Max Planck Institute for Intellectual Property, Competition and Tax Law Research Paper Series No. 09–01
- Grosse Ruse-Khan, H. (2008), Proportionality and Balancing within the Objectives for Intellectual Property Protection, in P.L.C. Torremans (Ed.), Intellectual Property and Human Rights Enhanced Edition of Copyright and Human Rights, London: Kluwer Law International
- Heinemann, A. (1995), Das Kartellrecht des geistigen Eigentums im TRIPS-Übereinkommen der Welthandelsorganisation, 54 GRUR Int. 1995, 535, Munich: C.H. Beck
- Helfer, L. (2003), Human Rights and Intellectual Property: Conflict or Coexistence?, 5 Minn. Intell. Prop. Rev. 2003, 47, Minneapolis: University of Minnesota Law School
- Hilty, R. (2007), The Law against Unfair Competition and its Interfaces, in R. Hilty & F. Henning-Bodewig (Eds.), Law Against Unfair Competition: Towards a New Paradigm in Europe?, Berlin: Springer

- Hilty, R. (2009), The Role of Patent Quality in Europe, in J. Drexl et al. (Eds.), Technology and Competition/Technologie et concurrence- Contributions in honour of/Mélanges en l'honneur de Hanns Ullrich, Brussels: Larcier
- Hilty, R. (2011), Individual, Multiple and Collective Ownership What Impact on Competition?, Max Planck Institute for Intellectual Property and Competition Law Research Paper No. 11–04, available at: http://ssrn.com/abstract=1774802 (accessed 1 June 2015)
- Höhne, F. (2013), Preamble, in J. Busche & P. Stoll & A. Wiebe (Eds.), TRIPs: Internationales und europäisches Recht des geistigen Eigentums, Cologne: Carl Heymanns Verlag
- Kelsen, H. (2008), The Law of the United Nations: A Critical Analysis of its Fundamental Problems, New Jersey: The Law Book Exchange
- Kur, A. (2009), Of Oceans, Islands, and Inland Water How Much Room for Exceptions and Limitations under the Three-Step Test?, 8 Rich. J. Global L. & Bus. 2009, 287, Richmond: University of Richmond Law School
- Lemley, M. & Melamed, A. (2013), Missing the Forest for the Trolls, 113 Colum. L. Rev. 2013, 2117, New York, NY: Columbia Law School
- Lemley, M. & Shapiro, C. (2007), Patent Holdup and Royalty Stacking, 85 Tex. L. Rev. 2007, 1991, Austin, TX: University of Texas Law School
- Lemley, M. & Weiser, P. (2007), Should Property or Liability Rules Govern Information, 85 Tex. L. Rev. 2007, 783, Austin, TX: University of Texas Law School
- Lemley, M. (2009), A Cautious Defense of Intellectual Oligopoly with Fringe Competition, 5 Rev. L. & Econ. 2009, 1025, Berlin: de Gruyter
- Lennard, M. (2002), Navigating by the Stars: Interpreting the WTO Agreements, 5 J. Int'l Econ. L. 2002, 17, Oxford: Oxford University Press
- Marceau, G. & Trachtman, J.P. (2004), GATT, TBT and SPS: A Map of WTO Law of Domestic Regulation of Goods, in F. Ortino & E. Petersmann (Eds.), The WTO Dispute Settlement System 1995–2003, The Hague: Kluwer Law International
- Merges, R. (1994), Of Property Rules, Coase, and Intellectual Property, 94 Colum. L. Rev. 1994, 2655, New York, NY: Columbia Law School
- Merges, R. (2006), Introductory Note to Brief of Amicus Curiae in eBay v. MercExchange, 21 Berkeley Tech. L.J. 2006, 997, Berkeley: UC Berkeley School of Law
- Merges, R. (2011), Justifying Intellectual Property, Cambridge, MA: Harvard University Press Mossinghoff, G. (2000), National Obligations under Intellectual Property Treaties: The Beginning of a True International Regime, 9 Fed. Circuit B.J. 2000, 591, Washington, D.C.: GWU Law School
- Peukert, A. (2011), Intellectual Property as an End in Itself?, 33 EIPR 2011, 67, London: Sweet & Maxwell
- Porat, I. (2009), Some Critical Thoughts on Proportionality, in G. Bongiovanni, G. Sartor & C. Valentini (Eds.), Reasonableness and Law, New York: Springer
- Rawls, J. (1999), A Theory of Justice Revised Edition, Cambridge, MA: Harvard University Press
- Reichman, J.H. (1997), From Free Riders to Fair Followers: Global Competition under the TRIPS Agreement, 29 N.Y.U. J. Int'l L. & Pol. 1997, 11, New York: New York University School of Law
- Rivers, J. (2010), A Theory of Constitutional Rights and the British Constitution, in R. Alexy, A Theory of Constitutional Rights, Oxford: Oxford University Press
- Rodrigues Jr., E.B. (2012), The General Exception Clauses of the TRIPS Agreement, Cambridge: Cambridge University Press
- Saggi, K. & Trachtman, J. (2011), Incomplete Harmonization Contracts in International Economic Law: Report of the Panel, China – Measures Affecting the Protection and Enforcement of Intellectual Property Rights, WT/DS362/R, adopted 20 March 2009, 10 World Trade Rev. 2011, 63, Cambridge: Cambridge University Press
- Sarnoff, J. (2010), Lessons from the United States in Regard to the Recent, more flexible Application of Injunctive Relief, in C. Correa (Ed.), Research Handbook on the Interpretation

- and Enforcement of Intellectual Property under WTO Rules Intellectual Property in the WTO Volume II, Cheltenham: Edward Elgar
- Sebastian, T. (2007), World Trade Organization Remedies and the Assessment of Proportionality: Equivalence and Appropriateness, 48 Harv. Int'l L.J. 2007, 337, Cambridge: Harvard University School of Law
- Sell, S. (2011), TRIPS Was Never Enough: Vertical Forum Shifting, FTAs, ACTA, and TPP, 18 J. Intell. Prop. L. 2011, 447, Athens, GA: The University of Georgia School of Law
- Senftleben, M. (2004), Copyright, Limitations and the Three-Step Test: An Analysis of the Three-Step Test in International and EC Copyright Law, The Hague: Kluwer Law International
- Smith, C. (2000), Patenting Life: The Potential and the Pitfalls of Using the WTO to Globalize Intellectual Property Rights, 26 N.C.J. Int'l L. & Com. Reg. 2000, 143, Chapel Hill, NC: University of North Carolina School of Law
- Straus, J. (1996), Bedeutung des TRIPS für das Patentrecht, 55 GRUR Int. 1996, 179, Munich: C.H. Beck
- Straus, J. (1996), Implications of the TRIPS Agreement in the Patent Field, in F.K. Beier & G. Schricker (Eds.), From GATT to TRIPS, Munich: Max Planck Institute for Foreign and International Patent, Copyright and Competition Law
- Stürner, M. (2010), Der Grundsatz der Verhältnismäßigkeit im Schuldvertragsrecht, Tübingen: Mohr Siebeck
- Taubman, A., Wager, H. & Watal, J. (2012), A Handbook on the WTO TRIPS Agreement, Cambridge: Cambridge University Press
- Ullrich, H. (1996), Technology Protection According to TRIPs: Principles and Problems, in F.-K. Beier & G. Schricker (Eds.), From GATT to TRIPs The Agreement on Trade-Related Aspects of Intellectual Property Rights, Weinheim: VCH Verlagsgesellschaft
- Ullrich, H. (2004), Expansionist Intellectual Property Protection and Reductionist Competition Rules: A TRIPS Perspective, 7 J. Int'l Econ. L. 2004, 401, Oxford: Oxford University Press
- Ullrich, H. (2015), The Political Foundations of TRIPS Revisited, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles (p. 85), Heidelberg: Springer (this volume)
- Weiß, W., Herrmann, C. & Ohler, C. (2003), Welthandelsrecht, Munich: C.H. Beck
- Westkamp, G. (2005), Convergence of Intellectual Property Rights and the Establishment of "Hybrid" Protection under TRIPS, in F. Macmillan (Ed.), New Directions in Copyright: Volume 1, Cheltenham: Edward Elgar
- Wittgenstein, L. (1953), Philosophical Investigations, Oxford: Basil Blackwell
- Yu, P. (2004), Currents and Crosscurrents in the International Intellectual Property Regime, 38 Loy. L.A. L. Rev. 2004, 323, Los Angeles: Loyola of Los Angeles Law Review
- Yu, P. (2010), The Objectives and Principles of the TRIPS Agreement, in C. Correa (Ed.), Research Handbook on the Protection of Intellectual Property under WTO Rules – Intellectual Property in the WTO Volume I, Cheltenham: Edward Elgar
- Yu, P. (2011), TRIPS Enforcement and Developing Countries, 26 Am. U. Int'l L. Rev. 2011, 727, Washington D.C.: American University Washington College of Law

The Commodification of Internet Intermediary Safe Harbors: Avoiding Premature Harmonization Around a Suboptimal Standard

Seth Ericsson

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Abstract Twenty years after the initial wave of national and international activity outlining the role of copyright within the world's first digital communications policy, the contours of a few fundamental policy principles at the intersection of copyright law and Internet regulation have begun to take shape. This paper focusses its attention on the continuing development of one such principle: The premise that legislatively mandated limitations on internet intermediary liability with regard to third party acts of copyright infringement (so-called safe harbors) are required to

Seth Ericsson is Research Fellow at the Max Planck Institute for Innovation and Competition.

Max Planck Institute for Innovation and Competition, Munich, Germany e-mail: seth.ericsson@ip.mpg.de

S. Ericsson (⊠)

promote investment and innovation in Internet-related infrastructure and technology in order to achieve the goal of a robust public information environment.

In the early days of the Internet, internet intermediaries argued that without certain limitations on their liability, little-to-no investment in the nascent information infrastructure would occur, i.e. there would be no market creation. Rightholders consistently countered this contention by arguing that, in the absence of adequate protection, they would not place their works online, i.e. there would be no goods on the market. Safe harbors were seen as a mechanism for ensuring right holder safety in the online environment without discouraging rapid market creation or hindering the democratic potential of the Internet. For the initial phase of the digital era, this compromise worked rather well.

This paper demonstrates that, while consensus may be found regarding the basic premise of this precept and perhaps even with regard to specific aspects of its implementation, there is certainly nothing approaching universal understanding on how to best effectuate the policy goal. The reasons for this disagreement are manifold and rather comprehensible. The rapidly evolving technological landscape, the differing national and regional approaches to the regulation of the Internet, and the diverse legal and cultural environments all combine to make arrival at a globally appropriate safe harbor regime very challenging.

Recognizing the obstacles to harmonization in this field is particularly relevant considering the ongoing attempts of the US to convince its trade partners to adopt a safe harbor framework largely equivalent to, and in certain respects likely narrower than, that which is laid out in the Digital Millennium Copyright Act (DMCA-plus). This paper argues that while harmonization may seem attractive given the international nature and overall importance of the Internet, standardization based upon an intricate and outdated internet safe harbor regime originally tailored to fit the needs of US industry is suboptimally configured for the digital communications policy requirements of the entire world.

1 Introduction

Terms such as *Technological Protections Measures* (TPIs), *Rights Management Information* (RMI) and *Internet Service Provider* (ISP) do not appear in the text of the Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS). In fact, TRIPS does not contain a single reference to the *Internet*. Negotiations during the Uruguay Round were simply not focused on trade-related aspects of

¹ Agreement on Trade-Related Aspects of Intellectual Property Rights, Marrakesh Agreement Establishing the World Trade Organization, Annex 1C, Legal Instruments—Results of the Uruguay Round of Multilateral Trade Negotiations, 1869 U.N.T.S. 299, 33 I.L.M. 1197 of 15 April 1994 (hereinafter TRIPS).

intellectual property rights in the digital environment. What at first glance appears to be a glaring omission is readily understood when one considers that TRIPS was negotiated before the digital revolution had arrived in its ubiquitous, commercial form.²

The absence of digital items on the TRIPS negotiating agenda figured prominently in the development of international copyright law in the ensuing digital era. Just as the Uruguay Round was winding to a close, international priorities shifted quickly and dramatically: What had been a lengthy negotiation on the proper place of established international principles of copyright within the broader context of the international trade regime, ³ rapidly transformed into a heated global debate about the appropriate role of copyright law in regulating questions of digital communications policy. ⁴

From the early 1990s onward, the development of copyright law has been inextricably bound to the evolutionary path of the Internet and the associated advancements in digital reproduction and dissemination technology. Since this time, analyzing the development of copyright law has largely entailed, first, identifying technological innovation associated with advancement in digital dissemination technology, second, chronicling the attendant reaction of the copyright industry, third, describing the ensuing process of copyright policymaking, and, finally, evaluating any related legal activity (judicial decision, agency order, legislative act etc.) by assessing its impact on authors, intermediaries and users in light of copyright's primary purpose of enhancing the public information environment. Examination of this co-evolutionary process has shown copyright law and policy to be primarily concerned with regulating the competitive relationship between the copyright industry and internet intermediaries. As is customary with copyright policymaking, authors and users of copyrighted works have also made meaningful

² A bit of historical context: Tim Berners-Lee invented the first web browser in 1990. Netscape, the "World's first popular browser", was not introduced until 1993. Microsoft did not get into the web browsing game until 1995 with the release of Internet Explorer 1. The founding dates of a few Internet intermediary giants are also informative in this regard: eBay Inc. (1995); Google Inc. (1998); Facebook Inc. (2004); YouTube LLC (2005).

³ W. Cornish & K. Liddell (2015), The Origins and Structure of the TRIPS Agreement, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 3 (this volume).

⁴ M.A. Hamilton (1996), The TRIPS Agreement: Imperialistic, Outdated, and Overprotective, 29 Vand. J. Transnat'l L. 1996, 613; the regulatory conception of copyright law is taken from T. Wu (2004), Copyright's Communications Policy, 103 Mich. L. Rev. 2004, 278.

⁵ The co-development of copyright law alongside reproduction and dissemination technologies is nothing new. J. Ginsburg (2001), Copyright and Control over new Technologies of Dissemination, 101 Colum. L. Rev. 2001, 1613.

⁶ J. Hughes (2004), On the Logic of Suing One's Customers and the Dilemma of Infringement-Based Business Models, 22 Cardozo A.E.L.J. 2004, 725; Electronic Frontier Foundation (2008), RIAA v. The People: Five Years Later, 30 September 2008.

⁷ See T. Wu (2004), Copyright's Communications Policy, 103 Mich. L. Rev. 2004, 278 (speaking in terms of market entrant disseminators and market incumbent disseminators).

cameo appearances. However, this has normally only occurred on occasions when the respective interests of authors and users have served to strengthen the position of either the copyright industry or internet intermediaries.⁸

The co-evolution of copyright law and digital dissemination technology has unfolded on a global scale. *At the national level*, the relationship among the relevant interest groups was formally structured according to first generation copyright legislation designed to address issues presented by the digital environment. Since this round of initial legislation, the judiciary has been called upon not only to interpret the specific provisions of this legislation, ¹⁰ but also to transpose relevant legal doctrines from an analogue world to a new digital reality. ¹¹ In the meantime, as the Internet has moved from the desktop to nearly every corner of society, previously unidentified or underestimated issues have come to the fore. ¹² However, legislation seeking both to address new issues as well as to update the first generation of digital copyright law has only recently been seriously contemplated. ¹³ As a result of this legislative inaction, and in light of the dynamic nature of the Internet and the evolving role of internet intermediaries within the online market-place, ordering among private actors has been steadily on the rise. ¹⁴

At the international level, norm creation via international treaty has been the mechanism of choice for adjusting copyright to the digital environment. Given a variety of factors, not least of which being the placement of the classical

⁸ J. Litman (2001), Digital Copyright.

⁹ See, WIPO Copyright and Performances and Phonograms Treaties Implementation Act of 1998, Pub. L. No. 105–304, 112 Stat. 2860 (codified as amended in scattered sections of 5, 17, 28, and 35 U.S.C.) (hereinafter DMCA); European Union Council Directive 2000/31, On Certain Legal Aspects of Information Society Services, in Particular Electronic Commerce, in the Internal Market ('Directive on Electronic Commerce'), 2000 O.J. (L 178) 1 (hereinafter ECD).

¹⁰ See e.g. Viacom Int'l, Inc. v. YouTube, Inc., 676 F.3d 19 (2d Cir. 2012) (interpreting §512(c) of the DMCA); see also ECJ, Scarlet Extended, C-70/10, EU:C:2011:771 (interpreting article 15 of the ECD).

¹¹ J. Hughes (2002), The Internet and the Persistence of Law, 44 B.C. L. Rev. 2002, 359. ("Perhaps one can think of the Internet as an Atlantis-like continent that has risen from the sea, been promptly populated, and now needs sufficient order to ensure that the inhabitants do not hurt one another (or the people on other continents) too much. The new region is now undergoing a program of "colonization"—lawyers, legislators, and lobbyists have moved quickly to extend familiar laws and regimes into the new territory.").

¹² These "newer" issues include: data protection, network neutrality, network design and regulation, freedom of expression, information and participation, network accessibility etc.

¹³ See e.g. Proposal for a Regulation of the European Parliament and of the Council on the Protection of Individuals with Regard to the Processing of Personal Data and on the Free Movement of such Data, COM (2012) 11 final (Jan. 25, 2012) (hereinafter: Draft Data Protection Regulation); See also Proposal for a Regulation laying down Measures concerning the European Single Market for Electronic Communications and to achieve a Connected Continent COM(2013) 627 final (Sept. 11, 2013).

¹⁴ Y. Lev-Aretz (2012), Copyright Lawmaking and Public Choice: From Legislative Battles to Private Ordering, 27 Harv. J.L. & Tech. 2012, 203; A. Bridy (2010), Graduated Response and the Turn to Private Ordering in Online Copyright Enforcement, 89 Or. L. Rev. 2010, 81.

international copyright system at TRIPS' substantive core, ¹⁵ the World Intellectual Property Organization (WIPO) has been the main forum for multilateral negotiations concerning substantive adjustments to copyright for the digital era. ¹⁶ However, the role of WIPO has been gradually reduced over to time to facilitating *either* sector-specific expansions of the international copyright treaty network *or* interest group-specific limitations to the scope of copyright protection. ¹⁷ More recently, and for reasons relating to the negotiating leverage created by forum shifting, ¹⁸ bi- and plurilateral free trade agreements (FTAs) have become the focus of international attempts to retrofit copyright and other intellectual property rights to the digital environment. ¹⁹

The status quo: 20 years after the initial wave of national and international activity outlining the role of copyright within the world's first digital communications policy, the norm creation process at both the *multilateral treaty* and *national legislative* level has stalled. Despite this stagnation, the incremental establishment of norms regulating the co-evolutionary development of copyright and digital dissemination technology continues. At the national level, it continues via judicial interpretation of first generation digital copyright law and adaptation of long-standing legal doctrine to the reality of the digital present. Within the multilateral environment, norm creation progresses as the amount of commonly accepted state practice increases.²⁰

¹⁵ S. Ricketson & J.C. Ginsburg (2006), International Copyright and Neighbouring Rights: The Berne Convention and Beyond, p. 136 (referring to "the double helix that is now formed between Berne and its associated agreements, on the one hand, and TRIPS, on the other").

¹⁶ See e.g., WIPO Copyright Treaty, 36 I.L.M. 65 of 20 December 1996 (hereinafter: WCT); WIPO Performances and Phonograms Treaty, 36 I.L.M. 76 of 20 December 1996 (hereinafter: WPPT and together with the WCT, the Internet Treaties).

¹⁷ For an example of expansion see Beijing Treaty on Audiovisual Performances, WIPO Doc. AVP/DC/20 of 24 June 2012 (hereinafter Beijing Treaty); for an example of limitation see Marrakesh Treaty to Facilitate Access to Published Works by Persons Who Are Blind, Visually Impaired, or Otherwise Print Disabled, WIPO Doc VIP/DC/8 of 27 June 2013 (hereinafter Marrakesh Treaty).

¹⁸ L.R. Helfer (2004), Regime Shifting: The TRIPs Agreement and New Dynamics of International Intellectual Property Lawmaking, 29 Yale J. Int'l L. 2004, 1; S. Sell (2009), Cat and Mouse: Forum-Shifting in the Battle over Intellectual Property Enforcement, American Political Science Association Meeting of 3–6 September 2009; H. Grosse Ruse-Khan (2011), The International Law Relation between TRIPS and Subsequent TRIPS-Plus Free Trade Agreements: Towards Safeguarding TRIPS Flexibilities?, 18 J. Intell. Prop. L. 2009, 325.

¹⁹ See S. Sell (2010), TRIPS Was Never Enough: Vertical Forum Shifting, FTAS, ACTA, and TPP, 18 J. Intell. Prop. L. 2010, 447; see also J. Drexl (2015), The Concept of Trade-Relatedness of Intellectual Property Rights in Times of Post-TRIPS Bilateralism, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 53 (this volume).

²⁰ For the more traditional and narrower approach to the role state practice in norm creation see Vienna Convention on the Law of Treaties, Art. 31(3)(b), May 23, 1969, 1155 U.N.T.S. 33 (regarding "any subsequent practice in the application of the treaty"). For a newer and broader take on the function of state practice in norm creation see G. Dinwoodie & R. Dreyfuss (2012), A

Although the process of norm creation by means of judicial interpretation remains largely incomplete and the number of internationally accepted state practices remains relatively small, the contours of a few fundamental policy principles at the intersection of copyright law and Internet regulation have begun to take shape in the past two decades. This paper focusses its attention on the continuing development of one such principle: The presumption that legislatively mandated limitations on internet intermediary liability with regard to acts of copyright infringement (so-called *safe harbors*) are required to promote investment and innovation in Internet-related infrastructure and technology in order to achieve the broader goal of a robust public information environment.

By superficially comparing the US and EU experiences with regard to this policy principle, this essay demonstrates that, while consensus may be found regarding the basic premise of this tenet, and perhaps even with regard to specific aspects of its implementation, there is certainly nothing approaching universal understanding on how to best effectuate the policy goal. Recognition of this lack of agreement is particularly relevant considering the ongoing attempts of the US to convince its trade partners to adopt a safe harbor framework largely equivalent to, and in certain respects narrower than, ²¹ that which is laid out in the Digital Millennium Copyright Act (DMCA). ²²

The reasons for the dissonance on this issue are manifold and rather comprehensible. The rapidly evolving technological landscape, the differing national approaches to the regulation of the Internet, and the diverse cultural environments all combine to make arrival at a globally appropriate and universally acceptable safe harbor regime very challenging. In light of these factors, this essay argues that while harmonization may seem attractive given the benefits of safe harbors, standardization based upon an intricate and outdated internet regime originally tailored to meet the needs of US industry is bound to be a poor fit for the digital communications policy requirements of the entire world.

The link between the issue of internet intermediary liability and TRIPS is not an entirely direct one.²³ Thus, in order to situate this topic within the focus of this volume, this essay opens with a wide-angle shot of the multilateral development of international copyright law with a particular emphasis on both TRIPS and the digital age. It then zooms-in to examine state (US) and regional (EU) practice concerning the liability of internet intermediaries, in general, and safe harbors in the context of copyright law, in particular. The essay concludes by transposing the

Neofederalist Vision of TRIPS: The Resilience of the International Intellectual Property Regime (formulating "an international intellectual property "acquis"—a set of basic principles that form the background norms animating the intellectual property system).

²¹ K. Opsahl & C. Rossini (2012), TPP Creates Legal Incentives For ISPs To Police The Internet. What Is At Risk? Your Rights, Electronic Frontier Foundation of 24 August 2012.

²²D. Seng (2010), Comparative Analysis of the National Approaches to the Liability of Internet Intermediaries of 10 November 2010 (preliminary version of WIPO study).

²³ S. Ricketson & J.C. Ginsburg (2006), International Copyright and Neighbouring Rights: The Berne Convention and Beyond, pp. 135–136.

knowledge gained through observation of state and regional experience to the realm of multilateralism in order to argue against the *mechanism* (FTAs), *manner* (secret negotiation) and *model* (DMCA) currently being employed to achieve harmonization in an area critical to the proper functioning of the globally networked world.

2 Gradually Global: The Analogue Phase of International Copyright Law Development

For the purposes of this essay, it is unnecessary to elaborate upon the specifics of the entire pre-TRIPS period of international copyright law development. This area has been well-mapped by many others. However, a brief description of the Berne Era treaty-making process is helpful in providing context for the subsequent international law-making procedures of TRIPS and beyond.

To be sure, TRIPS was a seminal event in the overall development of the international intellectual property system. Nonetheless, with regard to international copyright law, TRIPS does not embody an entirely new branch of development diverging from the classical network of international copyright treaties. This characterization is not only descriptively accurate, but also normatively significant as valuable interpretive guidance may be gained by placing TRIPS on a singular evolutionary pathway with intimate ties to antecedent, concurrent and subsequent developments in international copyright law.²⁴

Throughout the century following the Berne Convention,²⁵ its text was regularly amended in response to advances in technology which facilitated new forms of reproduction, dissemination and exploitation of creative works.²⁶ The change

²⁴R. Okediji (2008), Regulation of Creativity under the WIPO Internet Treaties, 77 Fordham L. Rev. 2008, 2393–2394; Panel Report, United States – Section 110(5) of the US Copyright Act, WT/DS160/R, adopted 27 July 2000, DSR 2000:VIII, p. 3769 ("In paragraph 6.66 we discussed the need to interpret the Berne Convention and the TRIPS Agreement in a way that reconciles the texts of these two treaties and avoids a conflict between them, given that they form the overall framework for multilateral copyright protection. The same principle should also apply to the relationship between the TRIPS Agreement and the WCT. The WCT is designed to be compatible with this framework, incorporating or using much of the language of the Berne Convention and the TRIPS Agreement. The WCT was unanimously concluded at a diplomatic conference organized under the auspices of WIPO in December 1996, one year after the WTO Agreement entered into force, in which 127 countries participated. Most of these countries were also participants in the TRIPS negotiations and are Members of the WTO. For these reasons, it is relevant to seek contextual guidance also in the WCT when developing interpretations that avoid conflicts within this overall framework, except where these treaties explicitly contain different obligations.").

²⁵ Berne Convention for the Protection of Literary and Artistic Works of 1886. As revised at Paris on 24 July 1971, and amended on 29 September 1979, 828 U.N.T.S. 221 (hereinafter Berne Convention).

²⁶ S. Ricketson & J.C. Ginsburg (2006), International Copyright and Neighbouring Rights: The Berne Convention and Beyond, p. 85 ("Article 17 of the 1886 Act provided for periodic Revision,

occurring in this period may be considered both *routine* and *gradual*. That is to say, approximately every 20 years, a standardized mechanism was placed in motion:²⁷ A new reproduction and/or dissemination technology was introduced. Within the various national jurisdictions, the copyright industry and market entrant disseminators disagreed on the application, or scope of application, of existing copyright laws to the new technology. This disagreement took the form of a rhetorical and legal battle which eventually resulted in a compromise between the interested parties at the respective national levels.²⁸ As a final step, an agreement consolidating these national compromises was negotiated and agreed upon at the international level and culminated in either amendments to the Berne Convention or the creation of a separate instrument.²⁹

TRIPS represented something quite different from this habitual method of incremental development. As many have noted, the major change brought about by TRIPS was the integration of the international intellectual property law system into the larger context of the World Trade Organization (WTO).³⁰ In this regard, the inclusion of the substantive obligations of the various intellectual property treaties within the WTO dispute settlement mechanism was of particular importance.³¹ Thus, TRIPS' primary modification was largely structural. TRIPS, especially with regard to copyright law, relied heavily on the classical international intellectual property system for its substantive core.³² As a result, although the more effective enforcement mechanisms of TRIPS were bound to affect the practical scope Berne's substantive provisions, it may be fair to characterize TRIPS as a migration of the existing international copyright regime to a new trade-centric environment characterized by the possibility of enhanced cooperation with regard to enforcement.

Given the divergent areas of emphasis, TRIPS and the Berne Convention may be accurately portrayed as representing distinct eras of international copyright development. However, the treaties may also be depicted as overlapping with their common features outweighing any differences. For instance, TRIPS relied heavily on classical international copyright law for its substance. In addition, both TRIPS

and these (apart from the first and last) have occurred at roughly twenty-year Intervals during this Period: in 1896, 1908, 1928, 1948, 1967, and then, finally, in 1971.").

²⁷ Ibid.

²⁸ P. Goldstein (2003), Copyright's Highway: From Gutenberg to the Celestial Jukebox; G.W. Austin (2012), Radio: Early Battles Over the Public Performance Right, in B. Sherman & L. Wiseman (Eds.), Copyright and the Challenge of the New, pp. 115–140.

²⁹ S. Ricketson & J.C. Ginsburg (2006), International Copyright and Neighbouring Rights: The Berne Convention and Beyond.

³⁰ D. Gervais (2008), The TRIPS Agreement: Drafting History and Analysis, p. 440.

³¹ S. Ricketson & J.C. Ginsburg (2006), International Copyright and Neighbouring Rights: The Berne Convention and Beyond, pp. 159–160 ("The real steel in the spine of the TRIPs Agreement is provided by the dispute-prevention and dispute-settlement provisions in articles 63 and 64.").

³² TRIPS Article 9(1); D. Gervais (2008), The TRIPS Agreement: Drafting History and Analysis, p. 213.

and Berne represented important modifications with regard to the organizational structure of the international copyright system: Just as the Berne Convention heralded the advent of the multilateral structure, TRIPS announced copyright's arrival within the global framework of international trade. And, last but not least, Berne and TRIPS are bound by another important commonality: Both are *digital immigrants*³³ facing similar difficulties in adapting to the paradigmatic shift brought about by digital reproduction and dissemination technology associated with the Internet.³⁴

3 Instantly International: The Digital Phase of International Copyright Law Development

3.1 The Forum

There is nothing especially peculiar about the first post-TRIPS adjustments to international copyright law transpiring within the familiar framework of WIPO. The return to WIPO was lobbied for and warmly welcomed by those lamenting the lack of balance within the TRIPS Agreement.³⁵ In addition, WIPO, as an institution, seems to have recognized the need to reestablish its position as the forum of choice and expertise in matters of international intellectual property policy making and treaty negotiation.³⁶ However, the choice of WIPO as the negotiating forum should be viewed neither exclusively as a regime-shifting reaction to TRIPS, nor merely as an act of institutional self-preservation. Instead, it should be understood as the logical and somewhat predictable result of placing the Berne Convention and the classical international copyright system at the center of TRIPS.

As the following shows, the return to WIPO was perhaps the only familiar facet of international copyright treaty making occurring in the immediate wake of TRIPS. Almost every other aspect, from the treaty making process to the final substance of the treaties, exuded an air of novelty.

³³ M. Prensky (2001), Digital Natives, Digital Immigrants, 9 On the Horizon 2001, 1. ("the single biggest problem facing education today is that our Digital Immigrant instructors, who speak an outdated language (that of the pre-digital age), are struggling to teach a population that speaks an entirely new language.").

 $^{^{34}}$ D. Desai (2014), The New Steam: On Digitization, Decentralization, and Disruption, 65 Hastings L.J. 2014, 1469.

³⁵ N.W. Netanel (1997), The Next Round: The Impact of the WIPO Copyright Treaty on TRIPS Dispute Settlement, 37 Va. J. Int'l L. 1997, 441.

³⁶G.B. Dinwoodie (2002), The Architecture of the International Intellectual Property System, 77 Chi.-Kent L. Rev. 2002, 1005.

3.2 The Procedure

On the surface, the WIPO Copyright Treaty (WCT) and WIPO Performances and Phonograms Treaty (WPPT) (together Internet Treaties) appear to embody the sort of routine change that had occurred at a relatively constant rate throughout the Berne Era in response to various advances in reproduction and dissemination technology.³⁷ However, if one attempts to insert the digital era law-making inputs into the standard amendment procedures discussed above, it becomes apparent that there is only a partial fit. The impetus was the same as it had been in the past, i.e. the introduction of a new dissemination technology.³⁸ However, the process for implementing changes to the international copyright system was substantially different.

The formation process of the Internet Treaties may even be considered as radical as the technological innovation it sought to address. In this regard, Professor Dinwoodie has pointed to three main characteristics of the Internet Treaties' synthesis which set it apart from the traditional international law-making process: "the *speed* with which the question of copyright protection in the digital arena . . . became a matter of international regulation; the *increased involvement* of NGOs in the international lawmaking process; and, the *assimilation* of national and international lawmaking." [emphasis added]

As to speed, considering the number of parties involved in the negotiating process and the complex issues on the table, the timeframe within which the Internet Treaties were finalized was stunning. Two completed international agreements in just over 5 years start-to-finish was, and remains, quite an accomplishment. However, faster is not always better. Such a rapid process left little-to-no time for state experimentation. This lack of legal tinkering at the national level was in stark contrast to the standard process of international consensus building which had previously relied heavily upon inputs from national legislation and state practice. ⁴¹

Although there may have been an absence of state practice informing the international process, the Internet Treaties were not negotiated in the dark. Instead of looking to existing national laws, the treaty-makers examined national proposals addressing issues arising from the growing importance of the Internet.⁴² These proposals supplied the international law-making process with points of departure

³⁷ The focus of this essay is on the WCT.

³⁸ B. Sherman & L. Wiseman (2012), Copyright and the Challenge of the New.

³⁹ G.B. Dinwoodie (2007), WIPO Copyright Treaty: A Transition to the Future of International Copyright Lawmaking, 57 Case W. Res. L. Rev. 2007, 758.

⁴⁰ J. Reinbothe & S. Lewinski (2002), The WIPO Treaties 1996: The WIPO Copyright Treaty and the WIPO Performances and Phonograms Treaty: Commentary and Legal Analysis.

⁴¹G.B. Dinwoodie (2007), WIPO Copyright Treaty: A Transition to the Future of International Copyright Lawmaking, 57 Case W. Res. L. Rev. 2007, 758.

⁴² Ibid.

for negotiations. In turn, the resulting international treaties shed new light on the discussions surrounding the proposed domestic legislation. This dialogue between the national and international fora, which included input from both national and international NGOs, facilitated the short completion timeline. ⁴³ Perhaps more importantly, it also contributed to an integrated national and international law-making process. ⁴⁴

Speed, expanded participation of NGOs and assimilation of national and international lawmaking are all interrelated factors describing *how* the process differed from previous international copyright law formation. Recognizing these differences is crucial for comparing the advantages and disadvantages of various international treaty-making procedures. However, unearthing the cause(s) behind this shift in the law-making process is of equal importance. Were these changes mere happenstance or were they brought about by a greater force(s) at work below the surface?

3.3 The Maneuvering

As *Zeitzeugen* of the WIPO Internet Treaty negotiations have recounted, ⁴⁵ the US position at the WIPO Conference was based on a White Paper which had originally been drafted to guide Congressional discussion on matters at the intersection of digital reproduction and dissemination technology and copyright law. ⁴⁶ For many observers, the White Paper policy proposals clearly pandered to the interests of the copyright industry. ⁴⁷ Not surprisingly, the White Paper was condemned by entrant disseminators and the nascent class of digital cognoscenti. ⁴⁸

The White Paper's recommendations regarding temporary reproductions, digital transmissions and liability for online service providers were met with heavy resistance by the telecommunications industry and a large contingent of the blossoming high tech sector (industries that would come to be known collectively as the Information and Communications Technology industry (ICT)). 49 These

Right to Read, 13 Cardozo A.E.L.J. 1994, 29.

⁴³ Ibid.

 $^{^{44}\,\}text{G.B.}$ Dinwoodie (2000), Essay: The Integration of International and Domestic Intellectual Property Lawmaking, 23 Colum. J.L. & Arts 2000, 307.

⁴⁵ P. Samuelson (1996), The U.S. Digital Agenda at WIPO, 37 Va. J. Int'l L. 1996, 369.

Working Group on Intellectual Property Rights, Information Infrastructure Task Force, Intellectual Property And The National Information Infrastructure of 1995 (hereinafter White Paper).
 P. Samuelson (1996), The U.S. Digital Agenda at WIPO, 37 Va. J. Int'l L. 1996, 369; P. Jaszi (1996), Caught in the Net of Copyright, 75 Or. L. Rev. 1996, 299; J. Litman (1994), The Exclusive

⁴⁸ P. Samuelson (1996), The Copyright Grab, Wired 4.01 of January 1996.

⁴⁹ Due corporate mergers, the traditional copyright industry may now, at least partially, be seen as part of the ICT. However, throughout the paper ICT is used to denote the cooperation between the telecommunications industry and high tech sectors of the economy at this particular point in history.

industries were extremely concerned by legislation which would indiscriminately render all temporary reproductions and digital transmissions of copyrighted works infringing.⁵⁰ This industry alliance argued that such a regime effectively ignored the technological realities of the digital world.⁵¹ They also contended that such a law would have a twofold chilling effect.

The first chilling effect related to investment and innovation. With the Damocles sword of copyright damages hanging over their collective head, ⁵² the ICT sector would be extremely reluctant or entirely unwilling to invest and innovate on the scale necessary to develop state of the art information infrastructures. ⁵³ As a result, the vast potential of the Internet would remain a mere theoretical aspiration.

The second chilling effect pertained to freedom of expression and other fundamental rights. Those intermediaries not scared off by the threat of damages would be essentially forced into the role of copyright police. ⁵⁴ As one of the leading White Paper critics of the time, Professor Samuelson, stated "If online service providers have to monitor everything users do [to avoid liability], they will artificially impose centralized structures of control over user communications." ⁵⁵ The ICT industry, joined by an array of voices from the scholarly world and net activist circles, asserted that such centralized structures of control would not only "chill many non-infringing online exchanges of information", but also negatively impact end-user privacy. ⁵⁶

Based on this robust opposition, the national lawmaking process came to a halt at an early stage. ⁵⁷ Despite this, the White Paper was employed as the basis for the US negotiating position at WIPO. ⁵⁸ It is generally believed that this was an attempt of the White Paper's creators to make an "end run" around Congress. ⁵⁹ As discussed below, this maneuvering proved to be only partially successful.

⁵⁰ J. Reichman, G.B. Dinwoodie & P. Samuelson (2007), A Reverse Notice and Takedown Regime to Enable Pubic Interest Uses of Technically Protected Copyrighted Works, 22 Berkeley Tech. L.J. 2007, 990.

⁵¹ P. Samuelson (1996), The U.S. Digital Agenda at WIPO, 37 Va. J. Int'l L. 1996, 382.

⁵² M. Stoltz (2014), Collateral Damages: Why Congress Needs To Fix Copyright Law's Civil Penalties, Electronic Frontier Foundation of July 2014.

⁵³ J. Reichman, G.B. Dinwoodie & P. Samuelson (2007), A Reverse Notice and Takedown Regime to Enable Pubic Interest Uses of Technically Protected Copyrighted Works, 22 Berkeley Tech. L.J. 2007, 989–990.

⁵⁴ Ibid.

⁵⁵ P. Samuelson (1996), The Copyright Grab, Wired 4.01 of January 1996.

⁵⁶ Ibid

⁵⁷P. Samuelson (1996), The U.S. Digital Agenda at WIPO, 37 Va. J. Int'l L. 1996, 373; J.S. Sheinblatt (2014), The WIPO Copyright Treaty, 13 Berkeley Tech. L.J. 2014, 545.

⁵⁸ J.S. Sheinblatt (2014), The WIPO Copyright Treaty, 13 Berkeley Tech. L.J. 2014, 545.

⁵⁹ P. Samuelson (1996), The U.S. Digital Agenda at WIPO, 37 Va. J. Int'l L. 1996, 374.

3.4 The Cause

US strategy was certainly a contributory cause of the modifications to international copyright treaty making procedure. However, it may also be reasonably argued that the move to the international sphere was mainly precipitated by the inherent qualities of the Internet.

Why did the process move so quickly? Why were so many different interest groups able to participate? And, why did a convergence of the national and international law-making processes occur? Because advances in digital communication technology associated with the Internet made it possible to communicate quickly, among many groups and on an international scale. ⁶⁰ In effect, the essential characteristics of the Internet are what facilitated the shift in treaty making procedures.

The perceived global significance of the Internet should not go without mention either. Although the concrete implications of a networked world were not fully apparent at the time of treaty formation, the overall potential of the technology was widely considered momentous. From a purely economic standpoint, the size and ferocity of the legal and policy battle between the copyright and ICT industries may be seen as an indicator of the anticipated economic importance of the Internet. This economic interest may, in turn, be taken as a proxy for the estimated societal significance of the Internet. Internet.

Along the same lines, lawmakers, both national and international, may not have known *exactly* what they were dealing with, but they knew they were dealing with something B-I-G and that something of this proportion required an international approach due to the ever increasing interdependence of nations.⁶³ There was, and certainly continues to be, considerable hype surrounding all things Internet-related.

⁶⁰ S. Ricketson & J.C. Ginsburg (2006), International Copyright and Neighbouring Rights: The Berne Convention and Beyond, p. 150 ("By comparison with the intimate nature of the early Berne conferences, this was a huge gathering, attended with all the colour and movement of any modern international meeting, with hurried corridor conferences, hectic lobbying, and frantic mobile telephone and e-mail communications between delegate, interest groups, and home bases."). Of course, the technology of the time seems almost stone-aged when compared to today's seamless communications standards. However, at the time, it was revolutionary. See S. Preston (1994), Electronic Global Networking and The NGO Movement: The 1992 Rio Summit And Beyond, 3 (2) Swords & Ploughshares: A Chronicle Of International Affairs (exploring the emergence of electronic communication at the United Nations Conference on Environment and Development (UNCED), held in June 1992 in Rio de Janeiro, Brazil).

⁶¹ Ibid, pp. 147–148.

⁶² The estimated importance of the Internet is also reflected in the language used to describe this issue. The rhetorical device of choice has been to analogize this public policy debate to war. J. Litman (2002), War Stories. 20 Cardozo A.E.L.J. 2002, 337; W. Patry (2009), Moral Panics and the Copyright Wars; P. Baldwin (2014), The Copyright Wars: Three Centuries of Trans-Atlantic Battle.

⁶³ WCT Preamble.

However, it would be almost laughable to argue that the fuss has been much ado about nothing.

Although some may argue that the procedural shift in international copyright lawmaking should be attributed to the forum-shifting aim of the US, a strong case may be made that the inherent nature of the Internet both *caused* and *facilitated* a transfer to the international arena. No matter how the move is most accurately explained, both factors continue to be highly relevant for the light they shed on current trends in international copyright lawmaking.

3.5 The Result

Once the negotiators arrived at WIPO, the stage was set for the creation of first generation copyright norms designed for the digital age. However, the lobbying feud which had begun at the national level rolled right along with the substantive issues into the international lawmaking arena. As had been the case in the US, the provisions relating most directly to the issue of intermediary liability were, once again, at the heart of a heated debate.⁶⁴

Without going into the fascinating minutia of the negotiations at Geneva, ⁶⁵ suffice it to say that the disagreement between the copyright and ICT sector resulted in a compromise on this issue. Originally, the ICT industry and its allies were proclaimed to have won the deal with the bargain being announced as the beginning of a new age in international intellectual property lawmaking, an age to be characterized by a more balanced approach. ⁶⁶ However, subsequent experience has led to a revision of this initial understanding. ⁶⁷

Indeed, during negotiation of the WCT, the ICT sector was able to soften the proposals of the US and its European allies. This meant that the copyright industry was not able to meet all of its protectionist goals. However, it is important to note that the copyright industry got much closer to its desired position in the final text of the WCT than it ever had at the national level.⁶⁸ In light of this fact, the sentiment

⁶⁴ It is important to note that there is no explicit mention of intermediary liability in the WCT. However, it is clear from the context that questions of intermediary liability were at the heart of the clash between the copyright industry and ICT industry. Both WCT Article 8 (Right of Communication to the Public) and WCT Agreed Statement Concerning Article 1(4) are axiomatic examples of this clash.

⁶⁵ See J. Reinbothe & S. Lewinski (2002), The WIPO Treaties 1996: The WIPO Copyright Treaty and the WIPO Performances and Phonograms Treaty: Commentary and Legal Analysis; see also M. Ficsor (2002), The Law of Copyright and the Internet: The 1996 WIPO Treaties, their Interpretation and Implementation.

⁶⁶ P. Samuelson (1997), Big Media Beaten Back, Wired 5.03 of March 1997.

⁶⁷R. Okediji (2008), Regulation of Creativity under the WIPO Internet Treaties, 77 Fordham L. Rev. 2008, 2393–2394.

⁶⁸ J.S. Sheinblatt (2014), The WIPO Copyright Treaty, 13 Berkeley Tech. L.J. 2014, 545.

that the WCT would somehow usher in a more balanced era of copyright law seems almost naïve in retrospect. ⁶⁹ Instead, perhaps more than anything, the WCT merely served to draw the battle lines along which the first 20 years of the digital copyright wars would be fought. In this regard, the rules of engagement enumerated in the provisions of the WCT have given little guidance to those caught in the trenches of legislative implementation and judicial interpretation.

For instance, the exclusive right of communication to the public found in Article 8 WCT appears to have been originally directed at the "initial act of making the work available". However, the evolution of digital dissemination technology has made it increasingly difficult to precisely define the scope of this making available act. In addition, overlaps, gaps and points of articulation among the rights granted by Article 8, the various national doctrines of secondary liability and legislatively mandated limitations on internet intermediary liability have combined to render this area of copyright law inordinately labyrinthine. As a result of this uncertainty and due to the economic importance of this sector, such issues have been fiercely and repeatedly litigated at the national level.

More than anything else, the WCT represented the international community's initial thoughts on how to best configure the relationship between copyright and digital dissemination technology. Given the newness of the subject matter and the collective appreciation for the potential impact any decision may have had on the tremendous potential of the Internet, the ambiguity is both expected and forgivable. In any case, uncertainty caused by vagueness is not always a bad thing. ⁷⁴ By remaining flexible, if one prefers a more positive spin, the WCT initiated and loosely framed an innovative discovery process at the respective national lawmaking levels.

⁶⁹ Ihid

⁷⁰ Basic Proposal for the Substantive Provisions of the Treaty on Certain Questions Concerning the Protection of Literary and Artistic Works to Be Considered by the Diplomatic Conference on Certain Copyright and Neighboring Rights Questions, Note 10.10, WIPO Doc. CRNR/DC/4 of 30 August 1996 (hereinafter: WIPO Draft Copyright Treaty).

⁷¹ M. Burri (2014), Permission to Click: Making Available via Hyperlinks in the European Union after Svensson, NCCR Trade Regulation Working Paper No. 20/2014 of 17 October 2014; A. Tsoutsanis (2014), Why Copyright and Linking can tango, 9 J. Intell. Prop. L. & Practice 2014, 495 (discussing the evolution of hyperlinking technology in the context of the recent Svensson case).

⁷²B. White (2010), Viacom v. Youtube: A Proving Ground for DMCA Safe Harbors Against Secondary Liability, 24 JCRED 2010, 811; C. Angelopoulos (2013), Beyond the Safe Harbours: Harmonising Substantive Intermediary Liability for Copyright Infringement in Europe, 3 IPQ 2013, 253; M. Leistner (2014), Structural Aspects of Secondary (Provider) Liability in Europe, 9 J. Intell. Prop. L. & Practice 2014, 76.

⁷³ A&M Records, Inc. v. Napster, Inc., 239 F.3d 1004 (9th Cir. 2001); In re Aimster Copyright Litig., 334 F.3d 643 (7th Cir. 2003); Metro-Goldwyn-Mayer Studios Inc. v. Grokster, Ltd., 125 S. Ct. 2764 (2005); UMG Recordings, Inc. v. Shelter Capital Partners LLC, 718 F.3d 1006, 1014 (9th Cir. 2013); Viacom Int'l Inc. v. YouTube Inc., 940 F. Supp. 2d 110, 122 (S.D.N.Y. 2013).

⁷⁴ See L. Kaplow (1992), Rules versus Standards: An Economic Analysis, 42 Duke L.J. 1992, 557.

4 From Similar Sources to Divergent Interpretation: EU & US Safe Harbors

As previously stated above the WCT negotiations did not take place in an environment entirely devoid of information. There had been quite a bit of policy dialogue taking place within the EU and the US in advance of the WCT treaty negotiations. These discussions were of particular importance for the negotiation process as they served as the point of departure for treaty drafting. However, although the EU and US proposals may have formed the basis for international discussion, the final text of the WCT was not a mere copy and paste of the original EU and US positions. What emerged from the international negotiations was an agreement more open to interpretation and implementation possibilities than initially envisioned. This was especially true for the hot-button topic of internet intermediary liability.

As a result of this flexibility, the EU and US legislative activities regarding safe harbors exhibit a pattern of development characterized by a point of common departure and an ever widening space of differing interpretation.⁷⁸ The following is an attempt to trace this divergent development by laying out the major themes and, where appropriate, pointing to both shared characteristics as well as uncommon ground.⁷⁹

4.1 The Issue of Liability in the Online Environment

Before addressing the individual legislation, it is important to remark upon the issue of liability surrounding the activities of internet intermediaries as such. For without the real threat of liability arising in a variety of everyday circumstances, the introduction of limitations would not have been necessary. In order to better understand this primordial issue of cyberspace regulation, a mini flashback to the years directly preceding WCT negotiations is necessary. ⁸⁰

With the general aim of transferring the enormous enforcement burden brought about by digital dissemination technology to internet intermediaries, the copyright

⁷⁵ P. Samuelson (1996), The U.S. Digital Agenda at WIPO, 37 Va. J. Int'l L. 1996, 369.

⁷⁶R. Okediji (2008), Regulation of Creativity under the WIPO Internet Treaties, 77 Fordham L. Rev. 2008, 2381; M. Burri (2014), Permission to Click: Making Available via Hyperlinks in the European Union after Svensson, NCCR Trade Regulation Working Paper No. 20/2014 of 17 October 2014, p. 4.

⁷⁷ See supra text accompanying fn. 64.

⁷⁸D. Seng (2010), Comparative Analysis of the National Approaches to the Liability of Internet Intermediaries of 10 November 2010 (Preliminary Version of WIPO Study); L. Edwards (2011), Role and Responsibility of the Internet Intermediaries in the Field of Copyright and Related Rights, WIPO-ISOC/GE/11/REF/01/EDWARDS of 22 June 2011.

⁷⁹B. Farano (2012), Internet Intermediaries' Liability for Copyright and Trademark Infringement: Reconciling the EU and U.S. Approaches, 14 TTLF Working Papers 2012, 1 (thoroughly investigating this issue with regard to both copyright and trademark law in the US and EU).

⁸⁰ Although this story is told from a US point of view, the European version of the story has the same basic plot. Ibid.

industry took the position that internet intermediaries should be held strictly liable for transmitting or hosting infringing works. ⁸¹ Indeed, widespread adoption of the strict liability approach would have essentially paved the way for copyright holders to bring suit directly against the ICT industry instead of being forced to chase after individual infringers. ⁸² For a time, it appeared as though this understanding of intermediary liability would carry the day. ⁸³

Not surprisingly, and as detailed above, the ICT industry was not amused by developments trending in this direction, and as economic and societal controversies of this magnitude are often wont, the question of intermediary liability was brought before the courts on more than one occasion. Gradually, courts began to favor a secondary liability standard which held intermediaries indirectly liable for the infringing actions of third parties under certain circumstances only.⁸⁴ Eventually, the indirect liability standard set out in these seminal decisions was accepted as the appropriate one.

Adoption of this conditional liability standard by the US judiciary proved to be influential on a global scale. It not only supported the ICT industry lobbying position in Congress and during international treaty negotiations, ⁸⁵ it also formed the logical basis for the DMCA and eventually went on to substantially shape a number of other regional and national legislative undertakings on this issue, including the E-Commerce Directive of the EU (ECD).

4.2 Policy Rationale

Generally speaking, the reasoning underlying both the DMCA and ECD safe harbor regimes is quite similar with accentuation of the various policy rationales differing only slightly between the two jurisdictions.

⁸¹ M.A. Lemley & R.A. Reese (2004), Reducing Digital Copyright Infringement without Restricting Innovation, 56 Stanford L. Rev. 2004, 1345.

⁸² See generally P. Swire (1998), Of Elephants, Mice, and Privacy: International Choice of Law and the Internet. ("In considering legal regulation of the Internet, there is an important distinction between large players, which one might call "elephants," and small and mobile actors, called "mice."... Elephants are large, powerful, and practically impossible to hide.... The situation is quite different for mice, which are small, nimble, and breed annoyingly quickly.").

⁸³ For instance, certain courts rendered decisions holding intermediaries strictly liable for transmitting and hosting infringing works placed on their networks by third parties. MAI Sys. Corp. v. Peak Computer, Inc., 991 F.2d 511 (9th Cir. 1993); Playboy v. Frena, 839 F. Supp. 1552 (M.D. Fla. 1993).

⁸⁴ Religious Tech. Ctr. (RTC) v. Netcom On-Line Commc' n Servs., Inc., 907 F. Supp. 1361 (N.D. Cal. 1995).

⁸⁵ See J. Reichman, G.B. Dinwoodie & P. Samuelson (2007), A Reverse Notice and Takedown Regime to Enable Pubic Interest Uses of Technically Protected Copyrighted Works, 22 Berkeley Tech. L.J. 2007, 981.

Perhaps most importantly, both the DMCA and ECD evidence a subscription to the policy assumption that intermediary exposure to liability can have a variety of negative impacts and these may be minimized through safe harbors. For instance, by removing fears of liability, internet intermediaries are encouraged to make the necessary investments in the nascent information infrastructure. Reference investments, in turn, generate public information enhancing effects by promoting fundamental rights such as freedom of expression and access to information. At the same time, by refraining from forcing internet intermediaries into the role of Internet Police, other fundamental freedoms, such as the right to privacy, are also served.

Reasoning in favor of limitations on liability was also based upon the dominant perception of the role and technical capabilities of intermediaries at the time. To a large extent, intermediaries were seen as, and viewed themselves, as passive pipelines for third party content. As such, the ICT industry contended it would have been simply unfair to hold them liable for activities that did not concern them. Moreover, intermediaries were not regarded as possessing, and portrayed themselves as not having, the technical capacity to monitor third party content. Thus, it would have been inequitable to make them responsible for activities beyond their control.

However, it must be noted that these arguments depicted merely one side of the policy coin. Countervailing policy rationales counseled against the wholesale adoption of an unconditional limitation on liability. These assumptions included: the idea that copyright holders would not make their works available online without a system in place that adequately assured protection; ⁹¹ the presumption that intermediaries were in the best position to effectuate efficient enforcement despite any technical limitations (least cost avoider); ⁹² and, the belief that intermediaries were not as passive as they seemed or made themselves out to be. ⁹³ As the conditional

⁸⁶The Senate Committee on the Judiciary Report (1998), S. Rep. No. 105–190 of 1998, p. 8 (hereinafter: Senate Report) (expressing concern that "without clarification of their liability, service providers may hesitate to make the necessary investment in the expansion of the speed and capacity of the Internet"); L. Edwards (2011), Role and Responsibility of the Internet Intermediaries in the Field of Copyright and Related Rights, WIPO-ISOC/GE/11/REF/01/EDWARDS of 22 June 2011, p. 6 ("In Europe this argument was even stronger as the US online industry already had a head start, and it was feared unlimited liability on EC online intermediaries would encourage them to migrate to more sympathetic jurisdictions").

⁸⁷ P. Samuelson (1996), The Copyright Grab, Wired 4.01 of January 1996.

⁸⁸ L. Edwards (2011), Role and Responsibility of the Internet Intermediaries in the Field of Copyright and Related Rights, WIPO-ISOC/GE/11/REF/01/EDWARDS of 22 June 2011; N. Elkin-Koren (2014), After Twenty Years: Revisiting Copyright Liability of Online Intermediaries, in S. Frankel & D. Gervais (Eds.), The Evolution and Equilibrium of Copyright in the Digital Age, pp. 29–51.

⁸⁹ Ibid.

⁹⁰ Ibid.

⁹¹ J. Ginsburg (1995), Putting Cars on the Information Superhighway: Authors, Exploiters, and Copyright in Cyberspace, 95 Colum. L. Rev. 1995, 1467.

⁹² R.H. Coase (1960), The Problem of Social Cost, 3 J.L. & Econ. 1960, 1.

⁹³ Senate Report supra fn. 86.

nature of the DMCA and the ECD both reveal, the copyright industry was rather successful in driving these policy points home to lawmakers on both sides of the Atlantic.

4.3 Regulatory Framework

Before moving to a brief description of the respective safe harbor provisions of the ECD and DMCA, it is important to situate the issue of liability for copyright infringement within the broader regulatory framework each jurisdiction chose to address the overarching issue of internet intermediary liability for other activity or types of content.

The EU approach has been described as *horizontal* in nature. Under this regime, internet intermediary liability is dealt with in generally the same manner regardless of the content type. ⁹⁴ By contrast, the US regulatory approach has been described as *vertical* with regard to both its internal structure as well as in relation to the EU system. This vertical approach is characterized by differing standards of liability applied to intermediaries depending on whether the content in question relates to intellectual property or other domains. ⁹⁵

The DMCA and ECD differ not only with regard to their overall regulatory structuring, but also with regard to the amount of detail they contain. To a certain degree, this discrepancy may be inherent to the vertical versus horizontal regulatory framework dichotomy. After all, if one attempts to set limitations on liability for all types of content according to a single norm, the legislation articulating this standard must necessarily be drafted with more encompassing language than a law designed to address limitations on liability with regard to a specific type of content.

The varying degrees of specificity may also be attributed to systemic institutional differences between the US and EU. The ECD, as a directive requiring further implementation at the member state level in order to be enforceable, merely provided a particular set of binding objectives while granting member states a certain level of freedom with regard to the designing of rules intended to achieve

⁹⁴ European Commission (2009), EU Study on the Legal Analysis of a Single Market for the Information Society, DLA Piper of 2009, Ch. 6 Liability of Online Intermediaries ("...the Service Providers will be exempted from contractual liability, administrative liability, tortuous/extracontractual liability, penal liability, civil liability or any other type of liability, for all types of activities initiated by third parties, including copyright and trademark infringements, defamation, misleading advertising, unfair commercial practices, unfair competition, publications of illegal content, etc.").

⁹⁵ For the latter types of content the less conditional standard of \$230 of the Communications Decency Act (CDA) applies. Communications Decency Act of 1996, Pub. L. No. 104–104, 110 Stat. 52. Very generally speaking, the CDA grants broad immunity from secondary liability to intermediaries as long as the content at issue was provided by a third party. ("No provider or user of an interactive computer service shall be treated as the publisher or speaker of any information provided by another information content provider.").

the aims of the directive. ⁹⁶ By contrast, the DMCA, as a directly enforceable piece of federal legislation, included far greater procedural detail. Because of these fundamental differences, the legislative acts demonstrate a relatively large measure of disparity with regard to their procedural components.

4.4 The Legislation

The DMCA is divided into five titles. Title II, The Online Copyright Infringement Liability Limitation Act (OCILLA), or what would eventually come to be known as §512, created the so-called safe harbors for internet intermediaries with regard to liability for copyright infringement. The functions or categories of conduct exempted are: Transitory Digital Network Communications, System Caching, Information Residing on Systems or Networks at Direction of Users (i.e. hosting and storage) and Information Location Tools (e.g. search engine results and hyperlinks). Lach category comes with a list of conditions which must be met by intermediaries in order to be eligible for the particular limitation on liability. In addition to these category-specific conditions, there are three generally applicable conditions which must be fulfilled as well. Underlying the entire safe harbor regime is the central guiding rationale that internet intermediaries should be as neutral as possible with regard to the copyright-protected content being transferred, cached, hosted or linked to on their service.

The ECD parallels the DMCA approach by providing conditional limitations on liability rather than blanket immunity to internet intermediaries. Similarly to the DMCA, the ECD refers to the functions of intermediaries in its exemptions.

⁹⁶ Art. 288 of the Treaty on the Functioning of the European Union ("A directive shall be binding, as to the result to be achieved, upon each Member State to which it is addressed, but shall leave to the national authorities the choice of form and methods.").

⁹⁷ 17 U.S.C. § 512 (2000).

⁹⁸ 17 U.S.C. § 512(a) (2000).

⁹⁹ 17 U.S.C. § 512(b) (2000).

¹⁰⁰ 17 U.S.C. § 512(c) (2000).

¹⁰¹ 17 U.S.C. § 512(d) (2000).

¹⁰² 17 U.S.C. § 512(a)-(d) (2000).

¹⁰³ 17 U.S.C. § 512(i),(k) (2000) ("The limitations on liability established by this section shall apply to a service provider only if the service provider—(A) has adopted and reasonably implemented, and informs subscribers and account holders of the service provider's system or network of, a policy that provides for the termination in appropriate circumstances of subscribers and account holders of the service provider's system or network who are repeat infringers; and (B) accommodates and does not interfere with standard technical measures.").

¹⁰⁴ N. Elkin-Koren (2014), After Twenty Years: Revisiting Copyright Liability of Online Intermediaries, in S. Frankel & D. Gervais (Eds.), The Evolution and Equilibrium of Copyright in the Digital Age, pp. 29–51.

The categories of conduct are akin to those found in the DMCA and include: being a mere conduit, ¹⁰⁵ caching, ¹⁰⁶ and hosting. ¹⁰⁷ Analogous to the DMCA, each exemption enumerates several conditions which must be fulfilled in order to profit from the particular exemption. In addition, the ECD sets out a generally applicable eligibility requirement (qualifying as an intermediary service provider). Last, but not least, the ECD is also underpinned by the policy perception and goal that intermediaries are and should remain neutral with regard to the content coming into contact with their respective services.

Although the DMCA and ECD demonstrate meta-similarity, there are more than a few differences in detail. A good example is the extent to which the DMCA and ECD differ with regard to their level of specificity regarding the steps to be taken when intermediaries must remove or to disable access to content upon obtaining knowledge of its infringing character. Whereas the DMCA provides for a detailed notice and takedown system in these circumstances, ¹⁰⁸ the ECD simply mentions the requirement of acting "expeditiously to remove" such content, leaving the exact procedural implementation to the member states. ¹⁰⁹ As will be discussed in the section on judicial interpretation below, this difference in precision has not only led to the implementation of an array of procedures among the EU member states, ¹¹⁰ it has also accentuated the issue of diverging judicial interpretation of seemingly similar norms which originated from almost identical policy rationales.

4.5 Judicial Interpretation

Since their introduction, the safe harbors of the DMCA as well as the ECD have been subject to substantial judicial review. At a relatively high level of abstraction, the cases share certain characteristics. For instance, in both jurisdictions the classification of intermediaries into one of the discrete categories of protection has been a question of primary importance. ¹¹¹ This has been particularly true with regard to the scope of the respective hosting safe harbors. ¹¹² In addition to this question of

¹⁰⁵ ECD Article 12.

¹⁰⁶ ECD Article 13.

¹⁰⁷ ECD Article 14.

¹⁰⁸ 17 U.S.C. § 512(c)(3) (2000).

¹⁰⁹ European Commission (2007), E.U. Study on the Liability of Internet Intermediaries, MARKT/ 2006/09/E of 12 November 2007, p. 5 (hereinafter: EU Liability Study) ("At the time when the directive was adopted, it was decided that notice and takedown procedures should not be regulated in the directive itself. Instead, Article 16 and recital 40 of the directive expressly encourage self-regulation in this field.").

¹¹⁰ Ibid. pp. 15–17.

¹¹¹B. Farano (2012), Internet Intermediaries' Liability for Copyright and Trademark Infringement: Reconciling the EU and U.S. Approaches, 14 TTLF Working Papers 2012, 1.

¹¹² Ibid.

taxonomy, courts in both jurisdictions have also been confronted with interpreting the specific elements of conditional liability under the relevant safe harbors. 113 Once again, the focus has been on the elements under the hosting safe harbors. 114 Another common concern of the courts in both Europe and the US has been parsing the complex relationship between liability as laid out in the safe harbor provisions of the ECD and DMCA and other doctrines of liability falling outside these regimes. 115 The similarity, however, stops here.

Although the courts may have been presented with the same general types of cases, their interpretation of comparable concepts has been rather different. For example, with regard to the threshold definitional question of what constitutes *hosting*, courts in the US have adopted a more encompassing understanding of hosting activity, while many European courts have interpreted the hosting safe harbor provided by Article 14 in a more restrictive manner. The divergent interpretation of this initial question regarding the mere classification of an internet intermediary as either a host or not-a-host has had a ripple effect throughout the entire internet intermediary ecosystem: Intermediaries essentially engaged in identical online activities are treated inconsistently across jurisdictions based upon their initial categorization. As the number of internet intermediary phenotypes continues to increase, this problem will only grow larger.

The interpretational paths of US and European courts have also diverged when analyzing the specific elements of conditional liability under the relevant safe harbors. Again, this has been especially true for the elements triggering liability concerning hosting activities. Although both §512(c) DMCA and Art. 14 ECD contain virtually the same conditional elements, courts in the EU and the US have construed them in diverse ways. For example with regard to the knowledge condition, both have similar wording with the DMCA language reading

A service provider shall not be liable . . . if the service provider—(A)(i) does not have actual knowledge that the material or an activity using the material on the system or network is infringing; (ii) in the absence of such actual knowledge, is not aware of facts or circumstances from which infringing activity is apparent [emphasis added]

and the ECD language stating

the service provider is not liable . . . on condition that: (a) the provider *does not have actual knowledge* of illegal activity or information and, as regards claims for damages, is *not aware of facts or circumstances from which the illegal activity or information is apparent*; [emphasis added]

¹¹³ Ibid.

¹¹⁴ Ibid.

¹¹⁵ M. Leistner (2014), Structural Aspects of Secondary (Provider) Liability in Europe, 9 J. Intell. Prop. L. & Practice 2014, 76.

¹¹⁶B. Farano (2012), Internet Intermediaries' Liability for Copyright and Trademark Infringement: Reconciling the EU and U.S. Approaches, 14 TTLF Working Papers 2012, 1.

¹¹⁷ Ibid.

Despite this linguistic identity, the knowledge standard has been interpreted relatively narrowly in the US and broadly in the EU. ¹¹⁸ This interpretive trend is present throughout most case law surrounding the hosting safe harbor. In other words, US courts consistently construe the elements of §512(c) narrowly and to the general advantage of intermediaries, while European courts construct the conditions of Article 14 broadly and, typically, to the general disadvantage of intermediaries.

The differences in fundamental regulatory architecture mentioned above have likely exacerbated the divergent interpretation of what appear to be, at least on their face, similar norms. A court examining a piece of legislation addressing a particular type of content may feel freer to interpret provisions broadly knowing that its construction is only likely to affect cases of a similar kind. In contrast, a court analyzing a piece of legislation which is intended to regulate several types of content may see less room to interpret provisions broadly in light of the wider reaching consequences of such a decision.

5 Harmonization Around DMCA-Plus

The previous section attempted to show that despite relative similarity with regard to both the policy basis and the legislative structure of the DMCA and the ECD, their paths of development began to depart from each other when interpreted by the courts. The reasons for this relate, generally speaking, to the overarching issues of a rapidly evolving technological landscape, the differing national and regional approaches to the regulation of the Internet, and the systemic differences between the US and EU with regard to both their institutional structures and their general legal and cultural environments. These discrepancies between the US and EU take on even greater meaning when they are examined within the wider context of the forum-shifting trend toward bi- and plurilateral free trade agreements and away from multilateral negotiating platforms. ¹¹⁹

¹¹⁸ Ibid

¹¹⁹ It must be noted that the Shift to bi- and plurilateral Free Trade Agreements has been roundly criticized for a Variety of generally applicable Reasons as well as several IP-specific ones. See H. Grosse Ruse-Khan et al. (2013), Principles for Intellectual Property Provisions in Bilateral and Regional Agreements, 44 IIC 2013, 878. From a procedural perspective, the FTA negotiations have been universally blasted not only for the (unnecessary and counterproductive) level of secrecy surrounding the negotiations, but also for the secrecy-related practice (again counterproductive) of allowing only a privileged few, usually industry lobbyists, to provide meaningful input during the drafting process. See D. Levine (2012), Bring in the Nerds: Secrecy, National Security, and the Creation of International Intellectual Property Law, 30 Cardozo A.E.L.J. 2012, 105; A. Bridy (2012), Copyright Policymaking as Procedural Democratic Process: A Discourse-Theoretic Perspective on ACTA, SOPA, and PIPA, 30 Cardozo A.E.L.J. 2012, 153. FTAs have also been criticized, to the extent possible given the limited access to draft proposals, on their substance as well. S. Flynn et al. (2011), Public Interest Analysis of the US TPP Proposal for an IP

Generally speaking, the move to bi- and plurilateral fora is rooted in the negotiating leverage such forum-shifting creates. ¹²⁰ In the case of IPR-related forum-shifting, it is relatively easy to spot the US practice of leveraging its overall trading appeal, i.e. privileged access to the large US market, in order to increase the overall level of protection afforded US IPRs within the jurisdiction of its trading partners. ¹²¹ Typically, the IPR matters receiving the greatest attention in such FTAs are patent and trademark-related issues concerning long-standing disagreements normally associated with the so-called *north south divide*. ¹²² In contrast, when one examines the copyright issues included in the FTAs, these are typically limited to matters surrounding limitations on intermediary liability, a topic to which no clear hemispherical boundary applies. ¹²³ However, given the importance of the copyright and ICT industries within the overall economy of US, the inclusion of safe harbor provisions in the FTAs is not surprising.

Over the past decade, the US has entered into many FTAs almost all of which have incorporated a slightly modified version of the DMCA rules regarding safe harbors. ¹²⁴ The US is also pushing for inclusion of such norms in the Trans-Pacific Partnership Agreement currently being negotiated. ¹²⁵ Thus, with one rather large exception, ¹²⁶ it is reasonable to assume that the US is seeking harmonization with regard to copyright-related safe harbors.

Chapter, Northeastern University School of Law Research Paper No. 82–2012 of 6 December 2011.

¹²⁰ See Max Planck Principles supra fn. 119.

¹²¹ Ibid.

¹²² Ibid.

¹²³ Matters relating to freedom of expression, privacy, and net neutrality, just to name a few, are present in the societal debates surrounding the safe harbors in all countries.

¹²⁴ U.S.-Sing. Free Trade Agreement of 6 May 2003, Art. 16.9, para. 22; U.S.-Chile Free Trade Agreement of 6 June 2003, Art. 17.11, para. 23; U.S.-Austl. Free Trade Agreement of 18 May 2004, Art. 17.11, para. 29; U.S.-Morocco of 15 June 2004, Art. 15.11, para. 28; U.S.-Dom. Rep.-Cent. Am. Free Trade Agreement of 5 August 2004, Art. 15.11, para. 27; U.S.-Bahr. Free Trade Agreement, Art. 14.10, para. 29 of 14 September 2004; U.S.-Oman Free Trade Agreement of 19 January 2006, Art. 15.10, para. 29; U.S.-Peru Trade Promotion Agreement of 12 April 2006, Art. 16.11, para. 29; U.S.-Colum. Free Trade Agreement of 22 November 2006, Art. 16.11, para. 29; U.S.-Pan. Free Trade Agreement of 28 June 2008, Art. 15.11, para. 27; U.S.-S. Kor. Free Trade Agreement of 30 June 2007, Art. 18.10, para. 30.

¹²⁵ Intellectual Property Chapter Working Document for all 12 Nations with Negotiating Positions, Wikileaks Release of 16 May 2014, available at http://wikileaks.org/tpp-ip2.

¹²⁶ It should be noted that the proposed Transatlantic Trade and Investment Partnership between the EU and US represents a conspicuous exception to this trend. Given the obvious discrepancies between the jurisdictions with regard to interpretation of matters concerning internet intermediary liability, one might have expected "improved regulatory coherence" (i.e. harmonization) or, at the very least, "improved cooperation" to be high on the secret negotiating agenda. In light of the importance of trade in digital goods and services, the omission is rather glaring. There are likely two explanations for this high-profile absence. Either the US and EU think that the level of harmonization in this field is acceptable as it stands or the trading partners have deliberately left it off the table given recent public reaction to such legislative efforts such as SOPA, PIPA and

This begs the question whether such harmonization is desirable. The advantages and disadvantages can be evaluated from two main perspectives: a user-rights outlook and an innovation and economic development point of view. The former inspects the serial exportation of the DMCA model in light of its known and potential flaws in relation to user rights. ¹²⁷ The latter approach examines harmonization efforts via FTAs in the context of the multilateral framework with a focus on innovation and economic development in the global ICT sector.

5.1 Impact on Fundamental Rights

First of all, it must be noted that, although the DMCA system was designed to provide internet intermediaries with the protection necessary to shield the fundamental interests of users, it still has several shortcomings in this regard. These deficiencies have become increasingly apparent over time. Second, the safe harbor provisions included in the FTAs are not simply a copy and paste of the DMCA and those FTA provisions which differ from the DMCA pertain to areas where user and intermediary interests are either (at best) not entirely aligned or (at worst) completely at odds. As a result of this disconnect, intermediary incentives to speak out on behalf of users during FTA negotiations are minimal to non-existent.

Much of the critical commentary surrounding the DMCA relates to the lack of protection for the due process rights of users. ¹³⁰ One aspect of this critique concerns the inherent procedural imbalance of the DMCA notice and takedown regime. An example of this inequitable asymmetry regards the discrepancy between the liability to which one is exposed when submitting a *notice of claimed infringement* and the risk of liability accompanying a *counter-notice*. Whereas a notification of claimed infringement need only include a "statement that the complaining party has a *good faith belief* that use of the material in the manner complained of is not

ACTA. In light of the already tense negotiating atmosphere and obvious lack of harmonization, the latter is much more likely.

¹²⁷D. Seng (2014), The State of the Discordant Union: An Empirical Analysis of DMCA Takedown Notices, 18 Va. J.L. & Tech. 369; M.E. Kaminski (2012), Positive Proposals for Treatment of Online Intermediaries, 28 Am. U. Int'l L. Rev. 2012, 203.

¹²⁸ Ibid.; J.M. Urban & L. Quilter (2006), Efficient Process or Chilling Effects – Takedown Notices under Section 512 of the Digital Millennium Copyright Act, 22 Santa Clara Computer & High Tech. L.J. 2006, 621; W. Seltzer (2010), Free Speech Unmoored in Copyright's Safe Harbor: Chilling Effects of the DMCA on the First Amendment, 24 Harv. J.L. & Tech. 2010, 171.
¹²⁹ M.E. Kaminski (2012), Positive Proposals for Treatment of Online Intermediaries, 28 Am. U. Int'l L. Rev. 2012, 203.

¹³⁰ Ibid., 10: "The most dangerous part of establishing intermediary liability safe harbors . . . is that the procedures often take place outside of the judicial system, . . . There are ways to better protect due process: Chile, for example, uses courts to determine whether material is infringing before intermediaries must take it down."

authorized by the copyright owner, its agent, or the law" [emphasis added], ¹³¹ a counter notification must include a "statement under *penalty of perjury* that the subscriber has a *good faith belief* that the material was removed or disabled as a result of mistake or misidentification of the material to be removed or disabled." [emphasis added]. ¹³²

A similarly lopsided DMCA procedural mechanism regards the time period internet intermediaries are allotted to respond to a notice of claimed infringement and counter-notice, respectively. In connection with a notice of claimed infringement an intermediary must act "expeditiously to remove, or disable access to, the material that is claimed to be infringing or to be the subject of infringing activity." In practice, this amounts to removal taking place immediately. This prompt removal for a notice of claimed infringement stands in sharp contrast to the counter-notice situation in which an intermediary may not re-enable access to removed content for a period of at least 10 days.

For many years commentators have criticized these and other aspects of the DMCA as systematically incentivizing the removal of content to the disadvantage of internet users and their fundamental rights of expression. ¹³³ Not surprisingly, the perpetuation of such procedural imbalance within FTAs has also drawn their considerable ire, especially in light of the fact that user-friendlier alternatives are known to exist. ¹³⁴

The FTAs have also been heavily criticized for provisions which mandate that signatories provide "legal incentives for service providers to cooperate with copyright owners in deterring the unauthorized storage and transmission of copyrighted materials." Such provisions are viewed as encouraging privately regulated copyright enforcement systems which threaten punishment for alleged violations of copyright ranging from bandwidth throttling to the temporary termination of user internet access. When compared with the extra-judicial notice and takedown regime of the DMCA, these private enforcement systems may be characterized as *due process twice removed*. Given the importance of the Internet in modern society

¹³¹ 17 U.S.C. §512(c)(3)(A)(i-vi).

¹³² 17 U.S.C. §512(g)(3)(c).

¹³³ D. Seng (2014), The State of the Discordant Union: An Empirical Analysis of DMCA Takedown Notices, 18 Va. J.L. & Tech. 369; W. Seltzer (2010), Free Speech Unmoored in Copyright's Safe Harbor: Chilling Effects of the DMCA on the First Amendment, 24 Harv. J.L. & Tech. 2010, 171.

¹³⁴ For example, Canada has implemented a notice and notice regime. Canada Copyright Modernization Act, Bill C-11, 41st Parliament § 47. Chile has involved the judicial system to determine whether a notice is justified. Chilean Law No. 17.336, Art. 85.

¹³⁵ See e.g. U.S.-Bahr. Free Trade Agreement of 14 September 2004, Art. 14.10, para. 29.

¹³⁶For an idea of what such private ordering looks like in practice see Center for Copyright Information (2014), CCI Provides First Copyright Alert System Progress Report Highlighting Initial Accomplishments, press release of 28 May 2014. "Bandwidth throttling is the intentional slowing of Internet service by an Internet service provider." http://en.wikipedia.org/wiki/Bandwidth_throttling.

as the primary means of communication, privately managed enforcement systems which threaten the termination of Internet accounts based upon violations of copyright law have been duly criticized as incompatible with the principle of proportionality underlying many legal regimes.¹³⁷

These due process-related criticisms represent but one facet of a more general fundamental rights critique of the DMCA model as such. When considered in isolation, these weaknesses caution against adoption of a DMCA regime. However, when added to the more economic and development-based critique below, these fundamental rights deficiencies render harmonization around the DMCA standard seem rather disadvantageous to anyone outside the copyright and ICT industries.

5.2 Effect on Innovation and Development

At first glance, harmonization of safe harbors may seem appealing from a multilateral perspective. After all, safe harbors were introduced to promote investment and innovation in Internet-related infrastructure in the hopes that such investment would lead to a robust public information environment. By many accounts, the safe harbors have helped in achieving this goal. In light of this, for many the obvious next step is to multiply this positive effect by introducing safe harbor regimes throughout the world. And, so the thinking continues, as the cumulative positive effect is likely to be greatest if one harmonized set of rules is introduced, an international standard would be best. After all, such a consistent structure would make it easier for internationally active intermediaries to do business in this increasingly important sector of the world economy.

However, it must be kept in mind that the introduction of safe harbors necessarily implies that there is a need to shield intermediaries from liability for matters relating to third party actions. This is not the case in all jurisdictions. There exists a range of understanding regarding liability standards for intermediaries in the digital environment. This is not only the case among jurisdictions, but also within jurisdictions as a brief examination of the EU experience makes clear. The safe is a safe to the safe that the introduction of safe harbors necessarily implies that there is a need to shield intermediaries from liability for matters relating to third party actions. This is not the case in all jurisdictions.

Economic efficiency gains resulting from increased legal certainty may also be offset by losses caused by regulatory inflexibility. As was mentioned above, an intricate internet intermediary liability regime, essentially an outdated compromise between the US copyright industry and ICT sector, is a suboptimal fit for the digital communications policy requirements of other nations. However, in addition to

¹³⁷ A. Bridy (2010), Graduated Response and the Turn to Private Ordering in Online Copyright Enforcement, 89 Or. L. Rev. 2010, 81; R. Giblin (2014), Beyond Graduated Response, in S. Frankel & D. Gervais (Eds.), The Evolution and Equilibrium of Copyright in the Digital Age, pp. 81–112.

¹³⁸ See M.E. Kaminski (2012), Positive Proposals for Treatment of Online Intermediaries, 28 Am. U. Int'l L. Rev. 2012, 203.

¹³⁹ See EU Liability Study supra fn. 109.

being an inefficient mismatch, it also strips countries of the flexibility needed to embark upon the innovative law-making discovery process necessary for adapting a shared policy goal to the realities of their domestic markets. 140

Harmonization around a DMCA model would also likely contribute to the further entrenchment of the US ICT industry at the top of the international economic pyramid in this essential, future-oriented sector of the world economy. In this regard, the relative lack of antagonism between the copyright industry and the ICT industry during the FTA negotiating process has been quite telling as it stands in glaring opposition to the dramatic scenes which played out during the WCT and DMCA negotiating process. There are of course several ways of interpreting this surprisingly cooperative atmosphere. Viewed in a naïve manner, one may say that the safe harbor provisions of the DMCA struck a perfect balance between the interests of the copyright holders and internet intermediaries to the collective benefit of authors and users alike.

A more skeptical take on this newfound friendliness between old battle foes recognizes the gradual alignment of interests between the copyright and ICT industries. The incentive to cooperate to the advantage of both has increased. The massive sharing of digital content which once drove enormous investment in information infrastructure has gone from being a thorn in the side of the copyright industry to representing a common obstacle to profit optimization within both the ICT and copyright industry. ¹⁴¹ Industries, it must be added, which have grown closer together in terms of corporate structure over the same period of time. ¹⁴²

In the mid-90s, the intermediary liability debate pitted users and intermediaries against the traditional copyright industry. Freedom from copyright infringement liability for intermediaries was equated with freedom of expression for users. This understanding reflected the technological and economic situation of the time. However, much has changed. ¹⁴³ Economically speaking, internet intermediaries can no longer be credibly portrayed as the little guy. ¹⁴⁴ Perhaps an even greater change has been the gradual divergence of user and internet intermediary interests. What originated as a friendship founded on the overlapping desire to create a robust

¹⁴⁰ See Max Planck Principles supra fn. 119.

¹⁴¹ N. Elkin-Koren (2005), Making Technology Visible: Liability of Internet Service Providers for Peer-to-Peer Traffic, 9 N.Y.U. J. Legis. & Pub. Pol'y 2005, 18 ("Here, ISPs and copyright holders, or for that matter, any law enforcement agencies, may share similar interests. Peer-to-peer technology, which was first introduced by non-market players, confronted ISPs with a dilemma: it boosted their business, increasing the demand for broadband and upgraded services, but at the same time created a growing burden of limitless bandwidth consumption.").

 $^{^{142}}$ Harmonization around a U.S. model may have far-reaching consequences for competition as well.

¹⁴³ For a thorough discussion on the changed role of intermediaries see N. Elkin-Koren (2014), After Twenty Years: Revisiting Copyright Liability of Online Intermediaries, in S. Frankel & D. Gervais (Eds.), The Evolution and Equilibrium of Copyright in the Digital Age, pp. 29–51.

¹⁴⁴ For example, Google is currently ranked fourth on the FT Global 500 list, which ranks company value by stock market price, FT 500 2014.

public information environment has become a tenuous issue-specific alliance. As the business models of intermediaries have grown to encompass content production and the strategic collection of user data, internet intermediaries' traditional position as neutral arbiters of internet freedom has been rightfully called into question.

6 Conclusion

Although digital issues were not included in the TRIPS negotiating process, any reinterpretation or reevaluation of TRIPS would be careless to ignore them. In the 20 years since TRIPS, the Internet has gone from the dream of democratization to the reality of commodification. In the realm of copyright law nothing better reflects this transition than the issue of internet intermediary liability and the associated limitations on such liability.

In the early days of the Internet, internet intermediaries argued that without certain limitations on their liability, little-to-no investment in the nascent information infrastructure would occur, i.e. there would be no market creation. Rightholders consistently countered this contention by arguing that, in the absence of adequate protection, they would not place their works online, i.e. there would be no goods on the market. Safe harbors were seen as a mechanism for ensuring right holder safety in the online environment without discouraging rapid market creation or hindering the democratic potential of the Internet. For the initial phase of the digital era, this compromise worked rather well.

However, the policy goal of a robust public information environment has gradually taken a back seat to the commercial interests of the US copyright and ICT industries. Safe harbors, which began as a means of promoting investment in Internet-related infrastructure in order to achieve the end goal of a robust public information environment, are now being shrewdly implemented as a global market position-enhancing device.

Over the same period, the relationship between the US digital agenda and multilateralism has flipped. In contrast to the WCT situation in which the copyright industry-driven agenda of the US buttressed the search for multilateral solutions, the present US search for leverage in bi- and plurilateral trade agreements now obstructs the type of multilateral approach once deemed so vital to the regulation of the Internet. Gone is the collective spirit and search for balance which characterized the trailblazing years of Internet development. And this despite the fact that issues presented by the digital environment have become even more complex and the Internet has emerged as the *central organizational element of global society*. 147

¹⁴⁵ WCT Preamble.

¹⁴⁶ Ibid.

¹⁴⁷ Internet Society (2014), Global Internet Report of 2014; McKinsey Global Institute (2011), Internet Matters: The Net's Sweeping Impact on Growth, Jobs, and Prosperity.

Given the pervasive nature of the Internet, it should be clear that issues pertaining intimately to its regulation are not simply a sector-specific aspect of secretive trade negotiations. Such matters are central to the structuring of global society and are appropriately discussed in an open, critical, multi-stakeholder environment. As such, the spread of a nationally conceived safe harbor model via the mechanism of FTAs is especially insidious as it forecloses the possibility of multilateral discussions regarding issues relating to a matter of tremendous global importance.

References

- Angelopoulos, C. (2013), Beyond the Safe Harbours: Harmonising Substantive Intermediary Liability for Copyright Infringement in Europe, 3 IPQ 2013, 253, London: Sweet & Maxwell
- Austin, G.W. (2012), Radio: Early Battles Over the Public Performance Right, in B. Sherman & L. Wiseman (Eds.), Copyright and the Challenge of the New, Alphen aan den Rijn: Wolters Kluwer
- Baldwin, P. (2014), The Copyright Wars: Three Centuries of Trans-Atlantic Battle, Princeton: Princeton University Press
- Bridy, A. (2010), Graduated Response and the Turn to Private Ordering in Online Copyright Enforcement, 89 Or. L. Rev. 2010, 81, Eugene: University of Oregon
- Bridy, A. (2012), Copyright Policymaking as Procedural Democratic Process: A Discourse-Theoretic Perspective on ACTA, SOPA, and PIPA, 30 Cardozo A.E.L.J. 2012, 153, New York: Benjamin N. Cardozo School of Law
- Burri, M. (2014), Permission to Click: Making Available via Hyperlinks in the European Union after Svensson, NCCR Trade Regulation Working Paper No. 20/2014 of 17 October 2014, available at: http://dx.doi.org/10.2139/ssrn.2511195 (accessed 21 November 2014)
- Center for Copyright Information (2014), CCI Provides First Copyright Alert System Progress Report Highlighting Initial Accomplishments, press release of 28 May 2014, available at: http://www.copyrightinformation.org/press-release/cci-provides-first-copyright-alert-system-progress-report-highlighting-initial-accomplishments/ (accessed 20 May 2015)
- Coase, R.H. (1960), The Problem of Social Cost, 3 J.L. & Econ. 1960, 1, Chicago: The University of Chicago Press
- Cornish, W. & Liddell, K. (2015), The Origins and Structure of the TRIPS Agreement, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles (p. 3), Heidelberg: Springer (this volume)
- Desai, D. (2014), The New Steam: On Digitization, Decentralization, and Disruption, 65 Hastings L.J. 2014, 1469, San Francisco: UC Hastings College of the Law
- Dinwoodie, G. & Dreyfuss, R. (2012), A Neofederalist Vision of TRIPS: The Resilience of the International Intellectual Property Regime, Oxford: Oxford University Press
- Dinwoodie, G.B. (2000), Essay: The Integration of International and Domestic Intellectual Property Lawmaking, 23 Colum. J.L. & Arts 2000, 307, New York: Columbia University School of Law
- Dinwoodie, G.B. (2002), The Architecture of the International Intellectual Property System, 77 Chi.-Kent L. Rev. 2002, 1005, Chicago: Chicago-Kent College of Law
- Dinwoodie, G.B. (2007), WIPO Copyright Treaty: A Transition to the Future of International Copyright Lawmaking, 57 Case W. Res. L. Rev. 2007, 758, Cleveland: Case Western Reserve University School of Law

- Drexl, J. (2015), The Concept of Trade-Relatedness of Intellectual Property Rights in Times of Post-TRIPS Bilateralism, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles (p. 53), Heidelberg: Springer (this volume)
- Edwards, L. (2011), Role and Responsibility of the Internet Intermediaries in the Field of Copyright and Related Rights, WIPO-ISOC/GE/11/REF/01/EDWARDS of 22 June 2011
- Electronic Frontier Foundation (2008), RIAA v. The People: Five Years Later, 30 September 2008, Available at: https://www.eff.org/wp/riaa-v-people-five-years-later (accessed 20 May 2015)
- Elkin-Koren, N. (2005), Making Technology Visible: Liability of Internet Service Providers for Peer-to-Peer Traffic, 9 N.Y.U. J. Legis. & Pub. Pol'y 2005, 18, New York, New York University
- Elkin-Koren, N. (2014), After Twenty Years: Revisiting Copyright Liability of Online Intermediaries, in S. Frankel & D. Gervais (Eds.), The Evolution and Equilibrium of Copyright in the Digital Age, Cambridge: Cambridge University Press
- European Commission (2007), E.U. Study on the Liability of Internet Intermediaries, MARKT/ 2006/09/E of 12 November 2007, p. 5, available at: http://ec.europa.eu/internal_market/ecommerce/docs/study/liability/final_report_en.pdf (accessed 20 May 2015)
- European Commission (2009), E.U. Study on the Legal Analysis of a Single Market for the Information Society, DLA Piper of 2009
- Farano, B. (2012), Internet Intermediaries' Liability for Copyright and Trademark Infringement: Reconciling the EU and U.S. Approaches, 14 TTLF Working Papers 2012, 1
- Ficsor, M. (2002), The Law of Copyright and the Internet: The 1996 WIPO Treaties, their Interpretation and Implementation, New York: Oxford University Press
- Flynn, S. et al. (2011), Public Interest Analysis of the US TPP Proposal for an IP Chapter, Northeastern University School of Law Research Paper No. 82–2012 of 6 December 2011, available at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1980173 (accessed 20 May 2015)
- Gervais, D. (2008), The TRIPS Agreement: Drafting History and Analysis, London: Thompson Reuters
- Giblin, R. (2014), Beyond Graduated Response, in S. Frankel & D. Gervais (Eds.), The Evolution and Equilibrium of Copyright in the Digital Age, Cambridge: Cambridge University Press
- Ginsburg, J. (1995), Putting Cars on the Information Superhighway: Authors, Exploiters, and Copyright in Cyberspace, 95 Colum. L. Rev. 1995, 1467, New York: Columbia University School of Law
- Ginsburg, J. (2001), Copyright and Control over new Technologies of Dissemination, 101 Colum. L. Rev. 2001, 1613, New York: Columbia University School of Law
- Goldstein, P. (2003), Copyright's Highway; From Gutenberg to the Celestial Jukebox, California: Stanford University Press
- Grosse Ruse-Khan, H. (2011), The International Law Relation between TRIPS and Subsequent TRIPS-Plus Free Trade Agreements: Towards Safeguarding TRIPS Flexibilities?, 18 J. Intell. Prop. L. 2011, 325, also available at: http://ssrn.com/abstract=1849204 (accessed 21 November 2014)
- Hamilton, M.A. (1996), The TRIPS Agreement: Imperialistic, Outdated, and Overprotective, 29 Vand. J. Transnat'l L. 1996, 613, Tennessee: Vanderbilt University Law School
- Helfer, L.R. (2004), Regime Shifting: The TRIPs Agreement and New Dynamics of International Intellectual Property Lawmaking, 29 Yale J. Int'l L. 2004, 1, New Haven: Yale University
- Hughes, J. (2002), The Internet and the Persistence of Law, 44 B.C. L. Rev. 2002, 359, Newton: Boston College Law School
- Hughes, J. (2004), On the Logic of Suing One's Customers and the Dilemma of Infringement-Based Business Models, 22 Cardozo A.E.L.J. 2004, 725, New York: Benjamin N. Cardozo School of Law
- H. Grosse Ruse-Khan et al. (2013), Principles for Intellectual Property Provisions in Bilateral and Regional Agreements, 44 IIC 2013, 878, Munich/Berlin: C.H. Beck/Springer

Internet Society (2014), Global Internet Report of 2014, available at: http://www.internetsociety.org/sites/default/files/Global Internet Report 2014 0.pdf (accessed 21 November 2014)

- Jaszi, P. (1996), Caught in the Net of Copyright, 75 Or. L. Rev. 1996, 299, Eugene: University of Oregon
- Kaminski, M.E. (2012), Positive Proposals for Treatment of Online Intermediaries, 28 Am. U. Int'l L. Rev. 2012, 203, Washington D.C.: American University Washington College of Law
- Kaplow, L. (1992), Rules versus Standards: An Economic Analysis, 42 Duke L.J. 1992, 557, Durham: Duke University School of Law
- Leistner, M. (2014), Structural Aspects of Secondary (Provider) Liability in Europe, 9 J. Intell. Prop. L. & Practice 2014, 76, Oxford: Oxford University Press
- Lemley, M.A. & Reese, R.A. (2004), Reducing Digital Copyright Infringement without Restricting Innovation, 56 Stanford L. Rev. 2004, 1345, Stanford: Stanford Law School
- Lev-Aretz, Y. (2012), Copyright Lawmaking and Public Choice: From Legislative Battles to Private Ordering, 27 Harv. J.L. & Tech. 2012, 203, Cambridge: Harvard University School of Law
- Levine, D. (2012), Bring in the Nerds: Secrecy, National Security, and the Creation of International Intellectual Property Law, 30 Cardozo A.E.L.J. 2012, 105, New York: Benjamin N. Cardozo School of Law
- Litman, J. (1994), The Exclusive Right to Read, 13 Cardozo A.E.L.J. 1994, 29, New York: Benjamin N. Cardozo School of Law
- Litman, J. (2001), Digital Copyright, Amherst, New York: Prometheus Books
- Litman, J. (2002), War Stories, 20 Cardozo A.E.L.J. 2002, 337, New York: Benjamin N. Cardozo School of Law
- McKinsey Global Institute (2011), Internet Matters: The Net's Sweeping Impact on Growth, Jobs, and Prosperity, available at: http://www.mckinsey.com/insights/high_tech_telecoms_internet/internet matters (accessed 20 May 2015)
- Netanel, N.W. (1997), The Next Round: The Impact of the WIPO Copyright Treaty on TRIPS Dispute Settlement, 37 Va. J. Int'l L. 1997, 441, Charlottesville: The Virginia Law Review Association
- Okediji, R. (2008), Regulation of Creativity under the WIPO Internet Treaties, 77 Fordham L. Rev. 2008, 2381, New York: Fordham University School of Law
- Opsahl, K. & Rossini, C. (2012), TPP Creates Legal Incentives For ISPs To Police The Internet. What Is At Risk? Your Rights, Electronic Frontier Foundation of 24 August 2012
- Patry, W. (2009), Moral Panics and the Copyright Wars, New York: Oxford University Press
- Prensky, M. (2001), Digital Natives, Digital Immigrants, 9 On the Horizon 2001, 1
- Preston, S. (1994), Electronic Global Networking and The NGO Movement: The 1992 Rio Summit And Beyond, 3(2) Swords & Ploughshares: A Chronicle Of International Affairs, Washington D.C.: American University Washington College of Law
- Reichman, J., Dinwoodie, G.B. & Samuelson, P. (2007), A Reverse Notice and Takedown Regime to Enable Pubic Interest Uses of Technically Protected Copyrighted Works, 22 Berkeley Tech. L.J. 2007, 990, Berkeley: UC Berkeley School of Law
- Reinbothe, J. & Lewinski, S. (2002), The WIPO Treaties 1996: The WIPO Copyright Treaty and the WIPO Performances and Phonograms Treaty: Commentary and Legal Analysis, London: Butterworths
- Ricketson, S. & Ginsburg, J.C. (2006), International Copyright and Neighbouring Rights: The Berne Convention and Beyond. New York: Oxford University Press
- Samuelson, P. (1996), The U.S. Digital Agenda at WIPO, 37 Va. J. Int'l L. 1996, 382, Charlottesville: The Virginia Law Review Association
- Samuelson, P. (1996), The Copyright Grab, Wired 4.01 of January 1996, also available at: http://archive.wired.com/wired/archive/4.01/white.paper_pr.html (accessed 20 May 2015)
- Samuelson, P. (1997), Big Media Beaten Back, Wired 5.03 of March 1997, also available at: http://archive.wired.com/wired/archive/5.03/netizen_pr.html (accessed 20 May 2015)

- Sell, S. (2010), TRIPS Was Never Enough: Vertical Forum Shifting, FTAS, ACTA, and TPP, 18 J. Intell. Prop. L. 2010, 447, Athens: The University of Georgia School of Law
- Sell, S. (2009), Cat and Mouse: Forum-Shifting in the Battle over Intellectual Property Enforcement, American Political Science Association Meeting of 3–6 September 2009, available at: http://www.ipgovernance.de/conferences/2009APSAToronto/Sell_APSA2009_Cat_and_Mouse.pdf (accessed 20 May 2015)
- Seltzer, W. (2010), Free Speech Unmoored in Copyright's Safe Harbor: Chilling Effects of the DMCA on the First Amendment, 24 Harv. J.L. & Tech. 2010, 171, Cambridge: Harvard Law School
- Seng, D. (2014), The State of the Discordant Union: An Empirical Analysis of DMCA Takedown Notices, 18 Va. J.L. & Tech. 369, also available at: http://ssrn.com/abstract=2411915 (accessed 20 May 2015)
- Seng, D. (2010), Comparative Analysis of the National Approaches to the Liability of Internet Intermediaries of 10 November 2010 (Preliminary Version of WIPO Study), available at: http://www.wipo.int/export/sites/www/copyright/en/doc/liability_of_internet_intermediaries. pdf (accessed 20 May 2015)
- Sheinblatt, J.S. (2014), The WIPO Copyright Treaty, 13 Berkeley Tech. L.J. 2014, 545, Berkeley: UC Berkeley School of Law
- Sherman, B. & Wiseman, L. (2012), Copyright and the Challenge of the New, Wolters Kluwer Stoltz, M. (2014), Collateral Damages: Why Congress Needs To Fix Copyright Law's Civil Penalties, Electronic Frontier Foundation, EFF of July 2014, available at: https://www.eff.org/files/2014/07/24/collateral damages.pdf (accessed 20 May 2015)
- Swire, P. (1998), Of Elephants, Mice, and Privacy: International Choice of Law and the Internet, available at: http://ssrn.com/abstract=121277 (accessed 20 May 2015)
- Tsoutsanis, A. (2014), Why Copyright and Linking can tango, 9 J. Intell. Prop. L. & Practice 2014, 495, Oxford:Oxford University Press
- Urban, J.M. & Quilter, L. (2006), Efficient Process or Chilling Effects Takedown Notices under Section 512 of the Digital Millennium Copyright Act, 22 Santa Clara Computer & High Tech. L.J. 2006, 621, Santa Clara: Santa Clara University School of Law
- White, B. (2010), Viacom v. Youtube: A Proving Ground for DMCA Safe Harbors Against Secondary Liability, 24 JCRED 2010, 811, Queens: St. John's University School of Law
- Wu, T. (2004), Copyright's Communications Policy, 103 Mich. L. Rev. 2004, 278, East Lansing: Michigan State University College of Law

Regulatory Innovation and the Institutional Design of the TRIPS Agreement

Rupprecht Podszun and Benjamin Franz

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Abstract This contribution seeks to provide an answer to the question how much regulatory innovation TRIPS allows. It starts from the premise that TRIPS fosters innovation—and actually legal regimes should also profit from the benefits of an innovative structure. This, however, clashes with traditional concepts of legal certainty. The benefits outweigh the costs of a less certain, more open legal regime. The debate on regulatory competition pays some attention to this. The authors thus analyse the TRIPS Agreement with specific focus on the regulatory power and pressure exerted by rules in TRIPS. For this endeavour, they apply an institutional perspective and turn to regulatory techniques used in TRIPS. Regarding the regulation of intellectual property in TRIPS, different mechanisms can be distinguished that have a different impact for the member states. To make this plain, the authors "code" the different instruments used in the Agreement with numbers attaching

Prof. Dr. Rupprecht Podszun is Professor at the University of Bayreuth and Affiliated Research Fellow at the Max Planck Institute for Innovation and Competition, Munich. Dr. Benjamin Franz was Research Assistant at the University of Bayreuth.

R. Podszun (⋈) • B. Franz

Faculty of Law and Economics, University of Bayreuth, Bayreuth, Germany e-mail: ls-podszun@uni-bayreuth.de

more extreme numbers to rules that have a high intensity of regulation. In a second step, the authors analyse the meta-structure of TRIPS to find out how open it is for adaption. Several different approaches towards TRIPS are included. In both instances, the authors point to the possibilities of change. A shift towards a more innovation-friendly, more open, more flexible regulatory regime would make TRIPS a "learning treaty".

1 The TRIPS Paradox

The protection of intellectual property is often justified by the aim of promoting innovation. Article 7 TRIPS explicitly recognises this as the first objective of TRIPS: "The protection and enforcement of intellectual property rights should contribute to the promotion of technological innovation [...]." According to *Joseph Schumpeter's* definition, innovation means "the doing of new things or the doing of things that are already done, in a new way." Innovation, thus, is about deviating from routine, having fresh ideas, inventing, and being creative. Innovation, though, requires more than having ideas, it is also about developing such ideas and diffusing these developments. *Schumpeter* stressed that innovation happens spontaneously and is a matter of dynamics. It discontinues conventional processes and leads to "creative destruction", as Schumpeter called it. Innovation changes existing patterns. It leads to the destruction or ignorance of established mechanisms, and it may also incite a complete redistribution of assets and income. Innovation, in short, is nothing for those who love stability.

The law as an institution aims at stability. Legal rules are designed to stand; they are static, and it seems only logical to conclude also conservative in nature,⁴

¹ See J.A. Schumpeter (1947), A Creative Response in Economic History, 7 J. Econ. Hist. 1947, 149, 151.

² Cf. G.M.P. Swann (2009), The Economics of Innovation, pp. 23 et seq.; J. Tidd & J. Bessant (2013), Managing Innovation, p. 18; R. Kraßer (2004), Patentrecht, p. 41. The process of knowledge diffusion is examined (with a strong focus on geographic proximity) by D. Bahar, R. Hausmann & C.A. Hidalgo (2012), International Knowledge Diffusion and the Comparative Advantage of Nations, HKS Faculty Working Paper No. RWP12-020. Their research does, however, also provide an overview of the general topic, cp. pp. 3 et seq.

³ J.A. Schumpeter (1976), Capitalism, Socialism and Democracy, pp. 81 et seq.; cf. S.W. Waller & M. Sag (2015), Promoting Innovation, 100 Iowa Law Rev. 2015, discussing Schumpeter from a lawmaking point of view.

⁴This is disputed, especially for the interpretation of law in systems that know precedent, cp. W. Fikentscher (1975), Methoden des Rechts, p. 146.

representing the ideas of a regulating order.⁵ Usually, legal rules aim at providing certainty and security, stabilizing the expectations of actors in an economic system in order to make them invest.⁶ In short, legal rules are not associated with change and discontinuity but with stability and continuity.

The TRIPS regime represents a paradox—it is an institution of stability that aims to promote instability.

In this chapter, we take a look at this paradox. We assume that innovation ought to be fostered by the rules set up in a society (even though we are aware that "more innovation" does not simply lead to the creation of new or more wealth). A pro-innovation policy may be generally agreed upon by patent lawyers and competition lawyers alike; in both fields, fostering innovation is a prime justification for creating and having the rules in the first place. If innovation has a positive impact on the economy, legal regimes need to be pro-innovative. Yet, more radically, we suggest that legal regimes themselves need to be open for innovation. The law needs creative destruction as much as the economy. The law, however, is innovation-averse. If innovation is defined as the process of having an idea, developing this idea to an invention and diffusing the invention to the markets, it becomes obvious that the legal sector has deficits in all three steps. Coming up with new ideas, incremental or radical, is not the main thrust of most legal research. If there is an idea, researchers in law are good but not excellent in developing it further. Yet, they are very bad at diffusing this idea to the market, i.e. the lawmakers who are not particularly keen buyers of new legislative inventions.

Our aim is to analyse the legal techniques used in the TRIPS framework from an institutional viewpoint⁸ and to suggest first ideas to introduce regulatory innovation in the design of TRIPS.

In our analysis of the innovation aspects of a legal regime with the particular example of TRIPS we will proceed as follows: In the next section, we will briefly examine the question whether innovation in legal regimes is a good thing and what role systemic competition may play. In Sect. 3, we refer to institutional economics as a methodology for our analysis. In Sect. 4.1, we present an analysis of the mechanisms of IP protection in TRIPS, including a new approach to highlight the impact of different mechanisms. In Sect. 4.2, we show how the TRIPS framework is open for new ideas. In our outlook (Sect. 5), we draw inspiration from the debate on standardisation in the EU and present our idea for TRIPS as a "learning treaty"—a vision of an innovation-friendly legal framework with institutional safeguards *against* stability.

⁵ Cf. M. Eifert (2008), Innovationsfördernde Regulierung, in M. Eifert & W. Hoffmann-Riem (Eds.), Innovationsfördernde Regulierung, pp. 11 et seq., stating that a criteria for regulation is that it serves to reach a certain (known) goal and therefore is contrary to an innovation process aimed at a surprising and new result.

⁶ Cf. R. Podszun (2014), Wirtschaftsordnung durch Zivilgerichte, pp. 107 et seq., 167.

⁷ Cf. G.M.P. Swann (2009), The Economics of Innovation, chs. 19 and 20.

⁸ An approach to the problems of law and innovation that tries to make use of principles of institutional economics has also been suggested with a focus on national law by W. Hoffman-Riem (2005), Risiko- und Innovationsrecht im Verbund, 38 Die Verwaltung 2005, 145, 170 et seq.

2 Innovation in Legal Regimes

This paper is based on the premise that legal regimes should strive for openness and dynamic features in order to enable discovery procedures that lead to the discovery of improved rules.

2.1 The Traditional Concept of Legal Regimes

Traditionally, the law follows the concept to provide for stability, a concept that is opposed to innovation, creative destruction or the diffusion of new ideas, diversity and differentiation. This traditional concept is embodied in the value of legal certainty. Legal certainty is seen as a value of overwhelming importance, as an "idée diréctrice" of the law, a common principle at least in Europe. In particular, legal certainty is closely related to concepts of property, and thus also intellectual property. Among the reasoning in favour of legal certainty, three aspects stand out:

- The normative reason for providing legal certainty is the guarantee that property rights are attributed as absolute rights to certain individuals.¹¹ This attribution relies on the stability of the legal regime.
- The political reasoning for legal certainty follows the conviction that the present order of society represents a status that should be maintained. Political stability stems from social, and consequently, legal stability.
- The economic reason for the need of legal certainty is that hold-up problems are solved if market actors know the legal setting for an investment. Rational decision-making (and this is what the market economy and international trade should be about) depends on risk assessment, and the more factors market actors can be certain about, the more rational their investment and consumption decisions can be.

For these reasons, the law as a central piece of configurations of expectations for decision-makers, generally is expected to be a long-running institution with minor changes over time.

⁹ See on the term "rule of law": e.g. W. Fikentscher (1975), Methoden des Rechts, pp. 133 et seq.; on legal certainty ibid. p. 143; comprehensively A. von Arnauld (2006), Rechtssicherheit; cf. on legal certainty and the rule of law: J. Waldron (2008), The Concept and the Rule of Law, NYU Research Paper Series No. 08–50, pp. 5 et seq.

¹⁰ A. von Arnauld (2006), Rechtssicherheit, pp. 625, 661.

¹¹ See O.A. Rognstad (2008), The Exhaustion/Competition Interface in EC Law – is there Room for a Holistic Approach?, in J. Drexl (Ed.), Research Handbook on Intellectual Property and Competition Law, pp. 427, 436; H.P. Götting (2014), Gewerblicher Rechtsschutz, p. 48, para. 1.

Legal certainty is maintained in different ways. It is secured by fundamental norms, ¹² it is embodied in the general attitude of lawyers, it is expressed in the restrictions for judges to deviate from existing (case-) law, ¹³ and it is also guaranteed by the complexity of the law-making process as a result of highly detailed procedural requirements.

2.2 The Benefits of an Innovative Legal Regime

Striving for legal certainty may, however, freeze to formalistic exercises. 14 The principle is upheld, but practice moves on. Often, new rules are adopted and ways are found to reinterpret old rules, circumvent or even ignore them. The rise of the internet is an example that legal regimes, e.g. copyright law, need to keep abreast with current developments. Yet, the static rules in place have proven inapt for the challenges of digitalisation. 15 There was little terminology that fitted the new phenomena (let alone concepts). Specific legislation concerning the internet proved to be anachronistic shortly after its adoption. Since the legislative process lacked adaptive pace the rules were both outdated (and often ignored) or amended without formal reform by courts or practice. Judge-made case law, the interpretation of the law through guidelines in a less formal legislative procedure, or the circumvention of laws are symptoms of the practical necessity to overcome the static nature of traditional law. If laws are so strong that they cannot be circumvented, the results are clashes and conflicts—exactly the opposite of stability and harmony. 16 The disputes of critics of copyright laws and representatives of the IP industries are examples for such clashes in which the perception that current rules are outdated is frequently submitted as an argument.

With a view to these problems, it seems more sincere and more forward-looking to design more flexible rules from the outset. A kind of law, that is more open for innovation can provide solutions to new conflicts or organisational problems in a dynamic environment. "Innovative law" or "smart law", as we may call it, has the

¹² See e.g. J. Waldron (2008), The Concept and the Rule of Law, NYU Research Paper Series No. 08–50, pp. 5 et seq.

 $^{^{13}}$ On the concept of precedent see R.J. Kozel (2014), The Scope of Precedent, 113 Mich. L. Rev. 2014, 179.

¹⁴Cf. the witty critique by R. Morgan (2012), Ensuring Greater Legal Certainty in OHIM Decision-Taking by Abandoning Legal Formalism, 7 J. Intell. Prop. L. & Practice 2012, 408 et seq.

¹⁵ Cf. P.S. Menell (2002–2003), Envisioning Copyright Law's Digital Future, 46 N.Y.L. Sch. L. Rev. 2002–2003, 63 et seq. about the challenges to intellectual property law posed by digital technology; also cf. R. Podszun (2015), The More Technological Approach: Competition Law in the Digital Economy, in G. Surblyte (Ed.), Competition on the Internet, pp. 101 et seq.

¹⁶ Cf. for a broader view on flexibility in societies and its effect on innovation: R.M. Kanter (1988), When a Thousand Flowers Bloom: Structural, Collective, and Social Conditions for Innovation in Organization, 10 Research in Organizational Behavior 1988, 169, 171 et seq.

potential to improve the quality and party-orientation of rules and judgements. ¹⁷ Arguably, more open legal regimes tend to be more efficient at solving the tasks assigned to the law. ¹⁸

Smart law, of course, may rest on the distinction of rules, standards and principles. According to Ronald Dworkin, "rules are applicable in an all-or-nothing fashion", thereby determining the decision in a case. 19 Principles, on the other hand, are considerations of a more general nature that may bring justice into the process of weighing arguments.²⁰ Standards are an instrument in between, giving guidance on how to assess behaviour in a specific situation. So, rules, standards and principles differ in the way they speak legal commands to those deciding how to act ex-ante (e.g. as a law-abiding citizen) or ex-post (e.g. as an adjudicator). The distinction is particularly valuable for adjudication in common law systems in which statutes are absent.²¹ Yet, they also provide a starting point for discussing the design of a legal regime. Kaufmann adopted the discussion for continental European regimes, emphasizing the difference between "Gesetz" und "Recht". 22 He concluded that there is a fundamental rule²³ below which the level of law²⁴ exists as a basis for the third, lowest level, which is the single decision.²⁵ This concept is based on a national system²⁶ and can, in our opinion, not be translated to TRIPS. The function of "law" as such is not unproblematic either. 27 We will, nevertheless, use the term "smart law" which has less tradition in comparative legal studies.

The main quality of a more principle-driven, ²⁸ regulatory approach—its flexibility—appears to us as a characteristic that should be considered when dealing with situations in which a basic framework is necessary, but fine-tuning requires different approaches. ²⁹ This might be a situation also encountered

¹⁷Cf. Lord Scarman in the well-known case McLoughlin v. O'Brien [1983] 1 AC 410.

¹⁸ Contended. US scholars put forward this argument for the efficiency-orientation of case law, see R.A. Posner (2011), Economic Analysis of Law, para. 19.2.

¹⁹ R. Dworkin (1978), Taking Rights Seriously, ch. 2.3.

²⁰ Ibid

²¹ From a comparative perspective see J. Esser (1990), Grundsatz und Norm, pp. 183 et seq.

²² As defined by A. Kaufmann (1962), Gesetz und Recht, in T. Würtenberger, W. Maihofer & A. Hollerbach (Eds.), Existenz und Ordnung – Publication in Honor of Erik Wolff, pp. 357, 362.

²³ "Grundsatznorm", ibid., p. 387.

^{24 &}quot;Gesetz".

²⁵ Ibid., p. 387.

²⁶ See for a critical analysis of general clauses in national law ibid., p. 386; stating that the application of the general clause § 242 BGB equals Munchhausen pulling himself out of the swamp on his own hair.

²⁷ Cp. for an overview on the different ideas of the term "law" in continental and common law W. Fikentscher (1977), Methoden des Rechts, p. 140.

²⁸ Cp. J. Esser (1990), Grundsatz und Norm, pp. 186 et seq.

²⁹ Ibid., stating that the principle survives even with the rule derived from it changing from case to case. For an economic analysis of rules and standards see L. Kaplow (1992), Rules Versus Standards: An Economic Analysis, 42 Duke L.J. 1992, 557.

vertically³⁰ in different countries that signed the TRIPS Agreement. TRIPS is a statute that is already present, so that some form of codification has taken place. This already reduces the possibilities to (re-)turn to a pure principle/rule distinction.

The TRIPS regime is not a statute like any other—it addresses states as actors and regulates on a very abstract general level. In such an instance, the main quality of rules cannot even be achieved positively: Rules have the advantage of giving clear guidance to those addressed by the rule in advance. Rules thus reduce the costs of seeking the lawful solution and trying to find out what the law is.³¹ Yet, no undertaking would directly turn to the TRIPS Agreement to find out how to behave properly. Instead they turn to the more specific and concrete national laws. For undertakings, having rules in TRIPS would not result in cost savings at all. For member states, it is easier to translate rules into national law than principles. Yet, from an efficiency point of view, the cost-saving effects may be marginal: if transposing an international treaty into national law requires a full-fledged national legislative procedure, it does not make a huge difference whether the translated law is very detailed or not from a pure cost-saving perspective. Principles, thus, are not particularly more expensive, yet they leave more leeway to the member states and thus make it possible to adapt.

Flexibility, openness and innovation in the law strip the law of a fundamental quality, namely stability and legal certainty. Yet, is this really such a problematic consequence if one bears in mind that legal regimes are evolving?³² Rules and principles are developing all the time. Accepting the dynamics of technology, markets and rules would enhance confidence in the law rather than weakening it. From a conceptual point of view, a legal regime may be open for dynamic developments, new instruments and disruptive ideas and still count as a legal regime (and not just a *fashion*). It may also be better suited to deal with the high degree of insecurity that comes with regulating innovation.³³ Coming from the traditional concept of stable rules, but also acknowledging the positive impact of innovation we propose a moderate focus on "smarter" laws. This may even better suit the hold-up problems legal certainty is there to fight. If "smart laws"³⁴ identify principles rather than provide rules for every single detailed problem, it is likely that these principles are respected in new constellations while it is unlikely that static rules are applied to "new cases".³⁵

³⁰ As opposed to "over time" as Esser shows when stating that the principle withstands different approaches in different cases over time.

³¹ Cf. L. Kaplow (1992), Rules Versus Standards: An Economic Analysis, 42 Duke L. J. 1992, 557 et seq.

³² Cf. R. Podszun (2014), Wirtschaftsordnung durch Zivilgerichte, pp. 132 et seq.

³³ See for a sociological analysis of "governance of innovation" A. Bora (2009), Innovationsregulierung als Wissensregulierung, in M. Eifert & W. Hoffmann-Riem (Eds.), Innovationsfördernde Regulierung, pp. 23, 40.

³⁴ See for the concept of "learning law" tailored to fit on the national level W. Hoffman-Riem (2005), Risiko- und Innovationsrecht im Verbund, 38 Die Verwaltung 2005, 145, 167 et seq.

³⁵On the concept of "new cases" see R. Podszun (2014), Wirtschaftsordnung durch Zivilgerichte, p. 156.

2.3 Regulatory Competition and "Smart Law"

The term "regulatory competition" has its roots close to other terms like interjurisdictional and locational competition. The technical terms in this field are not used or defined with absolute precision. The technical terms close to regulatory competition are "systemic competition", "competition of systems", "competition of countries" and more. We have chosen to use the term regulatory competition for one main reason: we address regulation as the central factor. Further below, we will refer to the idea of "voting by feet". Locational competition has been defined as a kind of competition that is driven by the ability of a location (describing a geographically specified area, e.g. a city, region, country) to compete and which depends on different factors (workers, public goods, infrastructure, laws and regulations, etc.) of which regulation is only one. The fact that IP rights are limited by the territorial extension of the governing body does not, in our opinion, make regulatory competition locational competition, but it may be understood as a subtype.

Innovation in legal regimes requires the possibility to discover such ideas at all and experiment with them. Competition offers such a "discovery procedure" and is seen as an excellent tool for innovation. Competition of legal regimes requires the ability to compete. Competition in the economy works via different products that differ in certain qualities and therefore in their ability to attract customers. Translated into legislation as a market with lawmakers as competitors, only if different rule sets are possible, competition can take place. It follows that the ability to develop different systems is a prerequisite of regulatory competition. Allowing different systems to be developed means new knowledge and be acquired on the national level *in* the system. ⁴² But it does also have a potential for the discovery or

³⁶Cf. W. Kerber & O. Budzinski (2003), Towards a Differentiated Analysis of Competition of Competition Laws, ZWeR 2003, 411 with further references in n. 1.

³⁷ See e.g. O. Vahrenholt (2011), Marktabgrenzung und Systemwettbewerb, pp. 21 et seq. understanding "system competition" as the competition of systems in a sense of products bundled together by consumers; G. Ambrosius (2005), Regulativer Wettbewerb und koordinative Standardisierung zwischen Staaten, p. 11, who does not make a difference between Institutionenwettbewerb, Systemwettbewerb and Standortwettbewerb.

³⁸ As W. Kerber & O. Budzinski (2003), Towards a Differentiated Analysis of Competition of Competition Laws, ZWeR 2003, 412 et seq. state, the term "regulatory competition" is not completely clear in itself either.

³⁹ C. Hafner (1998), Systemwettbewerb versus Harmonisierung in Europa, p. 10.

⁴⁰ F.A. von Hayek (1968), Wettbewerb als Entdeckungsverfahren, p. 5.

⁴¹ This characteristic, "new knowledge" is a very common one for different understandings of "innovation", see W. Hoffmann-Riem (2008), Immaterialgüterrecht als Referenzgebiet innovationserheblichen Rechts, in M. Eifert & W. Hoffman-Riem (Eds.), Geistiges Eigentum und Innovation, pp. 15, 20.

⁴² See about "learning law" on the national level W. Hoffman-Riem (2005), Risiko- und Innovationsrecht im Verbund, 38 Die Verwaltung 2005, 145, 167 et seq.

development of new knowledge on the international level as different systems work alongside each other driven by the search for the best solution to a current regulatory demand. Allowing to have different systems and innovation taking place are not similar, but the former is condition to the latter. Harmonisation of rules in an international framework stops the discovery procedure of different lawmakers as far as certain qualities are excluded. There is less room for experimenting with norms. This issue is discussed as systemic or regulatory competition.

Regulatory competition describes the rivalry between jurisdictions for the most attractive legal regime. It has been the subject of many publications, ⁴³ including evolutionary theories. ⁴⁴ The underlying assumption is that sovereign institutional arrangements may compete with one another. The analytical framework of competition between undertakings is thus transferred to the sphere of states competing with their *product*, the legal framework.

The typical example is the competition for companies that register in the jurisdiction that provides the "friendliest" rules. This model follows the very basic idea of "foot voting" of firms to other jurisdictions just like customers follow their preferences when choosing a seller. The "exit option" is sometimes influenced by the existence of a "voice option", the possibility to try to change the rules by protest or democratic measures. The very basic model for regulatory competition is the Tiebout Model. According to Charles Tiebout, communities (e.g. states) offer goods (e.g. IP protection) at a certain price (e.g. registration costs or exceptions to IP protection). If individuals (or companies) are free to choose their community according to their preferences, there will be equilibrium with an optimum allocation of companies in communities according to their preferences.

This model, however, is based on unrealistic assumptions. It simplifies regulatory competition.⁴⁸ One also has to take into account that IP regulation is not a matter where companies or individuals can simply choose. We are, therefore, somewhat close to Type III regulatory competition, which has been described by

⁴³ Cf. M. Lamping (2015), Intellectual Property Harmonization in the Name of Trade, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 313 (this volume). For an overview cf. D.A. Kenyon (1997), Theories of Interjurisdictional Competition, New Eng. Econ. Rev. 1997, 13 et seq.

⁴⁴ W. Kerber (1998), Zum Problem einer Wettbewerbsordnung für den Systemwettbewerb, in K.E. Schenk et al. (Eds.), JNPÖ Band 17: Globalisierung, Systemwettbewerb und national-staatliche Politik, pp. 199, 202 (n. 4) referring to M. Vihanto (1992), Competition Between Local Governments as a Discovery Procedure, 148 JITE 1992, 411 et seq.; V. Vanberg & W. Kerber (1994), Institutional Competition among Jurisdictions, 5 Constit. Polit. Econ. 1994, 193 et seq.

⁴⁵ Cf. V. Mehde (2005), Wettbewerb zwischen Staaten, pp. 98 et seq.

⁴⁶ A.O. Hirschman (1974), Abwanderung und Widerspruch, pp. 3 et seq., 17 et seq.

⁴⁷ C.M. Tiebout (1956), A Pure Theory of Local Expenditures, 64 J. Polit. Econ. 1956, 416.

⁴⁸ Cf. D.C. Esty & D. Geradin (2000), Regulatory Co-opetition, 3 J. Int'l Econ. L. 2000, 235, 252; J.H. Reichman (2000), The TRIPS Agreement Comes of Age: Conflict or Cooperation With the Developing Countries?, 32 Case W. Res. J. Int'l L. 2000, 441, 463 et seq., suggesting a cooperative-approach implementing TRIPS.

Kerber and *Budzinski* as a type with mobility of goods and services but also mobility of firms, capital and individuals and regulators competing for them. ⁴⁹

2.3.1 Costs of Regulatory Competition

Regulatory competition may be costly.⁵⁰ The harmonisation that is provided for by international agreements such as TRIPS serves the purpose to avoid such costs.

Firstly, regulatory competition leads to transaction costs since companies need to adapt to different legal regimes. The harmonisation sought after with TRIPS specifically tries to avoid such a fragmentation in order to make IP commercially exploitable across borders.⁵¹

A second concern with regulatory competition is the danger of distortions of competition on the national level for companies that are subject to different regulatory systems. Companies often primarily follow the legal rules of their home country ("home bias"). These rules may, thus, influence the chances in international competition.⁵²

Thirdly, regulatory competition may lead to privileges for companies with negative externalities for the public since certain interests are weighed higher than others. This, that is the main concern, may lead to competition by lowering standards and is often criticised as a race to the bottom.⁵³

2.3.2 Benefits of Regulatory Competition

For our purpose, two benefits of regulatory competition stand out.

Firstly, a benefit of regulatory competition is that the law is tested in different environments. The different solutions found in different environments due to the diverse paths that are followed lead to variations that may be selected—a process of evolution of legal regimes is started that leads to more suitable solutions in the long run. Experimenting on a national level is a factor for creating better international rules.⁵⁴ According to this line of thought, a "bottom-up" approach can, in this

⁴⁹ See W. Kerber & O. Budzinski (2003), Towards a Differentiated Analysis of Competition of Competition Laws, ZWeR 2003, 414 et seq.

 $^{^{50}}$ D.A. Kenyon (1997), Theories of Interjuris dictional Competition, New Eng. Econ. Rev. 1997, 13, 26 et seq.

⁵¹ G.B. Dinwoodie & R.C. Dreyfuss (2012), A Neofederalist Vision of TRIPS, p. 146.

⁵² W. Kerber (1998), Zum Problem einer Wettbewerbsordnung für den Systemwettbewerb, in K.E. Schenk et al. (Eds.), JNPÖ Band 17: Globalisierung, Systemwettbewerb und national-staatliche Politik, pp. 199, 217 et seq.

⁵³ Cf. V. Mehde (2005), Wettbewerb zwischen Staaten, pp. 592 et seq.; D.C. Esty & D. Geradin (2000), Regulatory Co-opetition, 3 J. Int'l Econ. L. 2000, 235 with empirical research focusing on law-making in environmental law.

⁵⁴ Cf. G.B. Dinwoodie (2007), The WIPO Copyright Treaties: A Transition to the Future of International Copyright Lawmaking?, 57 Case W. Res. L. Rev. 2007, 751, 760.

particular field, be more successful in developing institutions than a "top-down" approach.⁵⁵ In an existing framework, a bottom up approach is feasible where the national actors have room to experiment, or "wiggle room", as *Jerome Reichman* calls it.⁵⁶

Secondly, from a substantive point of view, regulatory competition allows different approaches in countries that differ in the socioeconomic environment. Scholars who claim that the level of protection for IP should differ in countries with different levels of development will find comfort in regulatory competition, i.e. less harmonising rules. The issue was raised with regard to TRIPS with the initial compound protection in TRIPS for pharmaceuticals (Article 27), the high barriers for granting a compulsory licence (Article 31), the non-disclosure for chemicals (Article 39 para. 3) or the duty to use the dispute settlement mechanism (Article 64). Costs for products may increase due to a stronger protection of IP, and this may hit less developed countries harder than rich ones, in particular with a view to access to necessary resources.

3 TRIPS through the Eyes of Institutional Economics

Turning to TRIPS and asking the question whether TRIPS is an innovation-oriented legal regime requires a more sophisticated analysis of its legal characteristics. The decision we take here is to interpret TRIPS as a framework for the promotion of innovation and not primarily as a legal document on individual rights. If we took the latter approach, a normative analysis would be more suitable. Understanding TRIPS as a tool for innovation makes it possible to lean to economics for the analysis. The application of institutional economics in the field of intellectual property is not a new idea. ⁶⁰ In this strand of thinking, rules and norms are seen

⁵⁵W. Kerber (1998), Zum Problem einer Wettbewerbsordnung für den Systemwettbewerb, in K.E. Schenk et al. (Eds.), JNPÖ Band 17: Globalisierung, Systemwettbewerb und national-staatliche Politik, pp. 199, 208.

⁵⁶ J.H. Reichman (2000), The TRIPS Agreement Comes of Age: Conflict or Cooperation With the Developing Countries?, 32 Case W. Res. J. Int'l L. 2000, 459 refers to "wiggle room", that can be used by states if the legal framework allows to do so.

⁵⁷Commonly a divide is seen between IP-exporting states and IP-importing states, cf. G.-B. Dinwoodie & R.C. Dreyfuss (2012), A Neofederalist Vision of TRIPS, p. 11.

⁵⁸ See P.K. Yu (2007), The International Enclosure Movement, 82 Ind. L.J. 2007, 827, 858 et seq., criticizing TRIPS as too close to the "rich-country model" of IP-protection; but see also P. Ganea (2008), TRIPS als Innovationsmotor?, in M. Eifert & W. Hoffmann-Riem (Eds.), Geistiges Eigentum und Innovation, p. 119 stating that harmful effects of TRIPS have not been proven.

⁵⁹ G.B. Dinwoodie & R.C. Dreyfuss (2012), A Neofederalist Vision of TRIPS, pp. 10 et seq.

⁶⁰ See for a general approach: R.P. Merges (2000), Intellectual Property Rights and the New Institutional Economics, 53 Vand. L. Rev. 2000, 1857; for patents: L. Vertinsky (2012), An Organizational Approach to the Design of Patent Law, 13 Minn. J.L. Sc. & Tech 2012, 211.

in their function to set incentives for individual behaviour.⁶¹ The pioneering *Douglass North* defines institutions as follows: "Institutions are the rules of the game in a society or, more formally, are the humanly devised constraints that shape human interaction."⁶²

Others define an institution as a *contract, a contractual system*, a *rule or a system of rules*. ⁶³ A further distinction is made between the *institutional environment* and the *institutional arrangement*, dating back to *North*:

The institutional environment is the set of fundamental political, social and legal ground rules that establishes the basis for production, exchange and distribution. Rules governing elections, property rights, and the right of contract are examples ... An institutional arrangement is an arrangement between economic units that governs the ways in which these units can cooperate and/or compete. It ... [can] provide a structure within which its members can cooperate ... or [it can] provide a mechanism that can effect a change in laws or property rights. ⁶⁴

TRIPS is, on the one hand, an institutional environment: a set of fundamental legal rules for the international protection of intellectual property, including sanctions and dispute resolution. On the other hand it is an institutional arrangement that governs the cooperation of member states on this issue. This double aspect of TRIPS needs to be taken into account. TRIPS provides a framework for actions as well as for interactions.

The advantage of institutional economics is that it ignores the normative content of legal rules. It is a tool to describe mechanisms at work; it is not a legal or normative instrument. Applying it to TRIPS serves the purpose to sharpen the eye for mechanisms and techniques of regulation. Even if it is not rent-seeking of individuals that determines the clauses in TRIPS, it is still actors—the states—that are attributed some rationality in their actions and that select from different possibilities and follow certain paths according to their public choice motives. TRIPS is agreed upon for reasons of comparative advantage. 65

Institution is not understood as "organisation" here. Organisation, in contrast, has been called the personified flip side of an institution. The establishment of organisations in systems is governed by the existing rules that manifest themselves in the organisations. Institutional design, therefore, has this complex double meaning of organisations and rules. ⁶⁶

⁶¹ M. Erlei, M. Leschke & D. Sauerland (2007), Neue Institutionenökonomik, p. 22.

⁶² D.C. North (1990), Institutions, Institutional Change, and Economic Performance, p. 3.

⁶³ M. Erlei, M. Leschke & D. Sauerland (2007), Neue Institutionenökonomik, p. 22.

⁶⁴ L.E. Davis & D.C. North (1970), Institutional Change and American Economic Growth: A First Step Towards a Theory of Institutional Innovation, 30 J. Econ. Hist. 1970, 131, 133; cf. O.E. Williamson (1993), Calculativeness, Trust and Economic Organization, 36 J.L. & Econ. 1993, 453, 457.

⁶⁵ Cf. H. Ullrich (2015), The Political Foundations of TRIPS Revisited, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 85 (this volume).

⁶⁶ See M. Erlei, M. Leschke & D. Sauerland (2007), Neue Institutionenökonomik, p. 22.

The organisational institutions set parameters themselves and are part of the institutional arrangement. ⁶⁷ In TRIPS, these organisations are established through the Marrakesh Agreement, ⁶⁸ cf. Article IV. ⁶⁹ TRIPS is governed by the Ministerial Conference, the General Council, and here in particular the TRIPS Council and the Dispute Settlement Body, comprising the Dispute Settlement Panels and the Appellate Body according to the Dispute Settlement Understanding (Article IV.3 Marrakesh Agreement, Article 17 DSU⁷⁰). Additionally, TRIPS may be a topic in the work of the Trade Policy Review Body, and it may be influenced by Trade Negotiation Committees or Working Groups. The Dispute Settlement Body is called upon for disputes in TRIPS according to Article 64 TRIPS. ⁷¹ All these fora constitute institutions in the sense of organisations.

4 Analysis of Regulatory Tools in TRIPS

It is the aim of this contribution to present analytical tools to measure how pro-innovative TRIPS is. To this end, we analyse the regulatory tools used for intellectual property (in the institutional environment of TRIPS) and the working mechanisms in the institutional arrangement of TRIPS. The analysis covers the techniques of regulation, not primarily the content of regulation.

4.1 The Institutional Environment: How is Intellectual Property Protected?

The first and basic decision of the regulators was to make TRIPS a minimum standard treaty. From a regulatory perspective, minimum standards push countries

⁶⁷ G.B. Dinwoodie & R.C. Dreyfuss (2012), A Neofederalist Vision of TRIPS, p. 7.

⁶⁸ Depiction of the WTO organization chart at the official website, available at: http://www.wto.org/english/thewto_e/whatis_e/tif_e/org2_e.htm (accessed 19 November 2014).

⁶⁹ Marrakesh Agreement, Agreement Establishing the World Trade Organization, 1995.

 $^{^{70}}$ World Trade Organization, Understanding on Rules and Procedures Governing the Settlement of Disputes.

⁷¹ For an analysis cf. J. Pauwelyn (2010), The Dog that Barked But Didn't Bite: 15 Years of Intellectual Property Disputes at the WTO, 1 J. Int'l Dispute Settlement 2010, 389; W.J. Davey (2005), The WTO Dispute Settlement System: The First Ten Years, 8 J. Int'l Econ. L. 2005, 17. ⁷² Drexl points out that the mechanisms are imported into TRIPS from the national standards and trade-offs known in IP regulation and may therefore miss an original international approach. It has to be conceded that some of the variants presented in this contribution may have the same deficit.

to be conceded that some of the variants presented in this contribution may have the same deficit. Cf. J. Drexl (2015), The Concept of Trade-Relatedness of Intellectual Property Rights in Times of Post-TRIPS Bilateralism, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 53 (this volume).

towards conformity or even uniformity in the field of intellectual property. The delegation of a subject matter to the international community generally means a reduction of innovative power in the field. There is a certain danger that TRIPS freezes intellectual property rules in their current state and has chilling effects for the subject matter it regulates. This system of harmonisation reduces the scope of action for members. Consequently, regulatory innovation is reduced. Lawyers lose the incentive to think creatively about new solutions on lower levels. Even if they come up with new ideas for regulation or deregulation, their closest legislators no longer have the power to legislate accordingly. The subject of the subject matter is a certain danger that TRIPS freezes intellectual property.

This is the "trap" of Article 1(1) TRIPS, as *Reto M. Hilty* calls the minimum standard rule.⁷⁵ Member states are forced into a system of protection that only knows one direction—the pro-rightsholder direction. Ceilings have a very limited role in TRIPS and other conventions.⁷⁶ The only treaty on ceilings on the international stage is the WIPO Marrakesh Treaty for the blind from 2013. A certain balance is introduced in the TRIPS principles in Article 8, granting leeway for exceptions to TRIPS for public health, nutrition and sectors of vital importance. It also contains a clause against the abuse of IP. The nature of these "principles" is, however, not entirely clear.⁷⁷ Competition law may also constitute a limit to IP.

The rule remains that IP is protected in a minimum standard based way. TRIPS has to be read as a treaty for the protection of rights of IP holders that are limited by principles that open a small path for exceptional cases. TRIPS starts a "race to the top" for rightsholders (or a race to the bottom for users, if you so want), but it does not allow for the other direction to be taken.

4.1.1 Variants of Law-Making

Apart from setting the direction of regulation, the authors of the TRIPS Agreement had different paths to choose when designing the protection for IP. We distinguish

⁷³ See G.B. Dinwoodie & R.C. Dreyfuss (2012), A Neofederalist Vision of TRIPS, p. 3.

⁷⁴ Some authors suggest that "policy flexibility" within the framework of TRIPS is a viable countermeasure to a problematic "one-size-fits-all" approach, cp. V. Vaish & M. Haji (2012), Is there a Need to 'Substantially Modify' the Terms of the TRIPS Agreement?, 17 JIPR 2012, 195, 197, especially referring to the Protection of Plant Varieties and Farmers Rights Act, at 200. ⁷⁵ R.M. Hilty (2015), Ways out of the Trap of Article 1(1) TRIPS, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 185 (this volume).

⁷⁶ Cf. A. Kur (2015), From Minimum Standards to Maximum Rules, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 133 (this volume).

⁷⁷ Cf. O. Brand (2009), in P.T. Stoll, J. Busche & K. Arend (Eds.), WTO, Article 8, paras. 5 et seq. On the proportionality principle and its role in TRIPS cf. M. Wallot (2015), The Proportionality Principle in the TRIPS Agreement, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 213 (this volume).

these decisions as variations that were on offer. With the following aspects we take the microscope to dissect the distinction of rules, standards and principles set out earlier. What options have law-makers chosen when designing TRIPS?

Substance or Procedure

The first variation is whether the rule in question in TRIPS deals with substantive law or with procedural law.

Substantive law means that the rule defines the subject matter or regulates the protection of intellectual property directly. Substantive rules are rules on content that are only applicable in this specific field.

Procedural law defines and regulates the procedures of enforcement or coordination processes. This is the more technical side of the law. Procedural laws do not necessarily relate to the subject matter but could be applied in other sectors of the economy alike.

Generally speaking, a rule on substance is stricter since it defines the direction of the regulation while enforcement techniques work as intensifiers of the direction taken. Without a rule on substance, a rule on procedure remains without purpose. Procedures can usually be used for both sides (rightsholders and users alike), at least as long as they are balanced and follow the most fundamental procedural rule of fairness (in particular, the right to be heard).

Right or Limit

The second variation relates to the question whether a right is granted to a rightsholder or a limit is set on the exercise of a right. If regulations require a right to be granted as a consequence of an action, the member state can no longer decide whether to grant this right or not. The reach of IP protection is defined.

Directly opposed to the granting of rights is the granting of space for the public domain or the protection of users. If the lawmaker decides to grant room for the public domain, e.g. by exempting certain works from copyright protection straight on, this would amount to an equally incisive step into the other direction.

Typically, however, the public domain is not protected in the first step but through the setting of limits to exercise rights. This statement seems to be not true in a non-dynamic, *ex-ante* situation. Looking at a hypothetical situation in which IP rights have not been assigned to individuals or entities, the conditions that have to be fulfilled to get an IP right in the first place, form a regulative protection of the public domain. Only if interested parties manage to fulfil the conditions, they will be able to get protection by an IP right in the first place. So *ex-ante*, the public domain is protected by limits set by requirements for acquiring IP protection. This hypothetical situation, however, does not completely cover the real-world challenges intellectual property faces. The question, whether the regulative protection

through conditions does still work in the real world cannot be discussed here.⁷⁸ But dynamic development tends to lead to IP rights being present in crucial markets (e.g. biotech, pharma, food, IT, etc.). Therefore the statement, that the public domain primarily needs specific provisions setting limits to the exercise of rights is, in our opinion, true in a real-world dynamic setting.

These are also binding for the member states, yet they move into the direction of less protection for rightsholders and more space for users. As exceptions to the rule, limits are not as powerful for users of IP rights as the attribution of an IP right is for the rightsholder.

Object or Action

The third variation deals with the question whether the protection or the limitation is awarded to an object as such or to an action, i.e. a specific way to make use of an object only. This distinction can be interpreted in two different ways that can be phrased as questions: "What is it that gets protection?", "Which actions are monopolized?"

To illustrate this distinction, a lawmaker could decide to protect sporting events as such (e.g. the Olympic Games) or the lawmaker could decide to protect certain actions only (e.g. the broadcast of a 100 m race for women taking place as part of the whole event). To put it more abstractly, the protection can originate from the object (every possible way to exploit your work, known or not at the time, is yours) or from the act (even if one can acquire an IP right, it is only possible to exploit a specific aspect, e.g. use of the sign to designate the origin of a product). This distinction is not completely similar to the scope of protection. The scope is a (possible) result but not in itself part of the distinction between object or act.

This distinction also works for the limitation side: The lawmaker could exempt whole objects from protection (e.g. sporting events are not protected) or certain actions could be exempted (e.g. the radio broadcast live from the stadium).

Protection originating from the object as such is more far-reaching and encompassing than the protection of certain actions only (and respectively for limitations).

Balancing

The fourth variation relates to the law-making technique of balancing rights and exceptions. Rights may be granted with no limitation at all, or they may be balanced by a specific exception or a specific restriction attached to the use of this right. If the

⁷⁸ See esp. for patents: C. Osterrieth (2009), Patent-Trolls in Europa – braucht das Patentrecht neue Grenzen?, 111 GRUR 2009, 540; A. Ohly (2008), "Patenttrolle" oder: Der patentrechtliche Unterlassungsanspruch unter Verhältnismäßigkeitsvorbehalt?, 57 GRUR Int. 2008, 787; with a focus on the IT-industry in the USA: M.A. Lemley & A.D. Melamed (2013), Missing the Forest for the Trolls, 113 Colum. L. Rev. 2013, 2117, 2170.

right is granted without further balancing, it is intense and restrictive for the member state and other interested parties. If a balancing exercise has to take place and is foreseen in direct connection with the right (typically in the same or the next provision), this leaves more leeway for the particular matter from the outset.

Degree of Detail

The fifth variation is the degree of detail that comes with the rule. An international rule to be implemented by the member state can be either very specific and concrete (a rule in the *Dworkinian* sense), or it can be formulated in the abstract and leave important aspects to the member state (a principle). A test for the degree of detail would be whether the norm is precise enough to be self-executing. If a norm could be directly applicable due to its exact and detailed provisions, this is a sign of a high degree of regulation while it would be a sign for a lower degree of regulation if the norm necessarily needs implementation and further rules for execution.

Ex Officio or Autonomy of Parties

Finally, the question is how the right or rule is placed within the legal framework. It can either be a rule considered by law as a necessary determination, or it can be an option that can be triggered by the parties in certain proceedings. If an authority, e.g. a court, has to follow a certain rule *ex officio* the degree of regulation is more intense than in cases when it is in the hands of the parties whether a matter needs to be considered. In the latter case, it may happen that the rule is not applied due to the privileged party refraining from invoking it.

4.1.2 Coding the Institutional Environment of TRIPS

In an effort to highlight the different elements of law-making and the regulatory selection of variants, we take a *quantitative* approach. We attach numbers to different decisions in order to make them clearly visible in their regulatory power, and we combine these numbers according to certain patterns to have a visible calculation of the regulatory effect. For example, we will show that Article 26 para. 1 has a regulatory power on our scale of 22, which represents a pro-rightsholder, but still moderate value. The values chosen for the coding process have a meaning only in the system itself. They are relative to each other as a part of the system and chosen as a *tool* to represent the impact certain decisions in the law-making process have in our measurement.⁷⁹

⁷⁹ It is true that, given another focus, different values could be chosen. This is, however, at our opinion an acceptable risk, as the focus is not so much on the values as such but on their usefulness as gears fitting into a larger machine.

We try to be exact, but also unflinching with this unusual exercise in order to hammer out our core idea. It makes a difference which path lawmakers choose. Lawmaking techniques have a huge impact in practice. If a rule grants balancing power to the adjudicator, this may ultimately save your case while a strict rule does not allow for any weighing. If a rule needs to be invoked by a party, this opens up room for negotiation while a rule respected *ex officio* does not. Such legal distinctions matter.

Codes for Different Variants

Imagine a path the lawmaker could take if it is decided to have a substantive rule on intellectual property protection.

The first decision is, do we grant a right or do we grant protection to the public domain? This decision stands for the direction of the law. If rightsholders are privileged we set a starting value of 19 for our coding endeavour. This choice will, as it is the result of the relativity in the system, become clearer as the model will be developed further. Some basic considerations are these: Firstly, the value should represent a certain high intensity as it is important early in the process and influences it to the end. Secondly, the value should be at least high enough, so that the choice to grant a right cannot be completely negated by choices possible further along the path in comparison to the path of the public domain. If the public domain is privileged we start with 1.

After this decision, the next variant is the protection of an object or of actions. In the path of rightsholder protection, the privilege for objects is more far-reaching than the protection of actions. Thus, objects are attributed a 3, while actions are attributed a 1. In the limitation path it is directly the other way round: a 1 for object, a 3 for actions.

The next step is the decision whether or not to balance the norm in the same norm. We attach a 2 if the protection of the rightsholder is imbalanced in the norm, while we attach a 0 if there is a balancing. It is vice versa for the public domain path.

With this pattern it is possible to create a sum. For instance, a rule granting protection to rightsholders for specific actions that is not balanced in the norm would have 19+1+2=22 points on our scale. A rule on limiting protection that is exempting certain objects from protection and does not contain any exception to this exemption would have 1+1+0=2 points. This scale ranges from 20 to 24 in the case of protection, and 2 to 6 in the case of limitation. The higher the scale in the protection path and the lower the scale in the limitation path, the higher is the regulatory intensity.

We also take into account whether the norm is self-executing. If this is the case, the regulatory influence is higher than if the norm needs interpretative implementation by the member states. A very detailed and explicit norm works as an

intensifier for harmonisation and therefore we multiply the figure from the path by 2 if it is a protection norm and we divide it by 2 in the case of limitation.

It can also be the case that the invocation of a norm requires an action by the parties. In such cases the content of the norm is not considered *ex officio*. If this is the case, the room for negotiation between the parties of litigation is opened up. For this granting of autonomy to parties we divide the result in protection cases by 2 and multiply in limitation cases by 2.

Thus, a very concrete, self-executing norm that neither leaves room for implementation through the member state nor leeway to the parties may reach up to 48 points. The least intense protection rule would have at least 10 points. This would be a right granted to the rightsholder, for actions, is balanced, not very detailed and needs invocation through a party.

A very strong protection for the public domain by an object with no balance that is very detailed and has to be considered *ex officio* would reach 1 point. A rather not so strong protection of the public domain, namely the protection for certain actions, balanced with rightsholder rights, specific in its wording and dependent upon party invocation would reach a maximum of 12 points. The closer the number comes to 48 or to 1 the higher is the harmonising pressure for the member state and the intensity of international regulation.

We decided to place the pro-right-holder code at 19 while the pro-user code is only 1. This mirrors our understanding that a pro-right-holder-oriented system is more formal and restrictive than a system that leaves more room to users. The reason is that the lock-in into the IP system brings about many follow-up-restrictions and formal requirements. The minimum standard implies that TRIPS only works in the direction of ever-higher protection of IP rights. Positive effects through leaking, reverse engineering and other forms of technology transfer are made difficult.

This not only affects developing countries but also the industry within the countries that hold more IP rights. Small- and medium-sized enterprises, start-ups and social users of IP rights in developed countries may be disadvantaged as well if these actors find that the costs of IP rights are too high.

Our calculation model can be visualised as seen in Fig. 1.

Examples from Copyright Law

Let us take a look at Article 12 dealing with the term of protection for copyrighted works to illustrate how a rule in TRIPS can be coded through this pattern. Article 12 reads:

Whenever the term of protection of a work, other than a photographic work or a work of applied art, is calculated on a basis other than the life of a natural person, such term shall be no less than 50 years from the end of the calendar year of authorized publication, or, failing such authorized publication within 50 years from the making of the work, 50 years from the end of the calendar year of making.

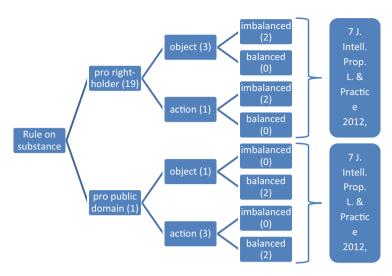


Fig. 1 Calculation Model

This rule deals with substantive law. It grants a right to the author. It deals with an object of protection, the work. There is no balance or exception for the term of protection. It is very concrete and does not leave implementing scope for the member state. It is a rule considered by law, not invoked by a party in proceedings. Accordingly, the institutional code of this norm in our model is $(19+3+2)\times 2$, result of which is 48. It reaches the extreme end of regulatory intensity.

Another example shows that rules may exert less pressure on the member state and give more leeway for innovative solutions. Article 11 reads:

In respect of at least computer programs and cinematographic works, a Member shall provide authors and their successors in title the right to authorize or to prohibit the commercial rental to the public of originals or copies of their copyright works. A Member shall be excepted from this obligation in respect of cinematographic works unless such rental has led to widespread copying of such works which is materially impairing the exclusive right of reproduction conferred in that Member on authors and their successors in title. In respect of computer programs, this obligation does not apply to rentals where the program itself is not the essential object of the rental.

This rule deals with substantive law. It grants a right to the author. The right is restricted to certain actions, namely the commercial rental. There are specific exceptions in the rule that leave room for the member state and its organs to decide in individual cases. It is a concrete obligation (of minor degree, however, since the exact terms of the right are not specified). There needs to be a rule, but whether it is invoked lies with the author. Accordingly, the institutional code of this norm in our model is $(19+1+0) \div 2$, result of which is 10 (and one could even discuss the degree of concreteness).

Examples from Industrial Designs

If we look at industrial designs (Articles 25 and 26) for another test of the code we see the full picture for one subject matter protected in TRIPS:

Article 25 para. 1.1 grants protection to industrial designs (by object). Article 25 para. 1.2 and 1.3 open the legislative room for member states to exempt certain designs from protection. Here, we have a protection by object which is balanced. Interestingly, the agreement leaves the details to the member states and therefore makes it possible to find different regulatory solutions on the path. The institutional code would be (19+3+0)=22.

Article 25 para. 2 contains the obligation for member states not to impair the protection of textile designs through a costly protection process. The details are completely left to the member state. We thus have a rule in favour of the rightsholder, related to certain actions (the process of seeking protection), while exceptions and details may differ. Thus, the institutional code is (19+1+0)=20.

Article 26 para. 1 grants protection for certain actions related to industrial designs. It is a straightforward rule with detailed prescriptions. Yet, the norm stipulates explicitly that the right needs to be invoked by the rightsholder. The code is $(19+1+2) \times 2 \div 2 = 22$.

Article 26 para. 2 grants protections for users of industrial designs and constitutes an exception to Article 26 para. 1. The wording is vague, balancing exercises need to be undertaken and the member states do have a lot of leeway in framing this limitation. Therefore, the code is (1+3+2)=6. It is an example for a protection of user interests that is not strongly interfering with member states regulatory processes.

Article 26 para. 3 finally contains the minimum duration of protection (10 years). It is a rule in favour of rightsholders, related to the object as such (industrial designs); there is no balance or exception. It leaves room to the member state, but only in one direction (extension of the period of protection) and thus needs to be seen as a fully harmonising norm. The code is $(19+3+2)\times 2=48$.

This analysis of the protection of industrial designs shows that the lawmaker took a relatively moderate approach. Yet, the technique for regulating the duration of protection is very strong, and the harmonising pressure for the pro-user rights is very limited. There is not a real balance between the interests of rightsholders (who are protected in a detailed way) and users.

Interpretation of the Codes

The interpretation of the codes suggested here is the following: The higher the sum for an institution, the more restrictive and the less open it is for innovation. The least harmonising/restrictive pro-rightsholder rule has a result of 10. The most restrictive pro-rightsholder rule, a directly applicable, fully harmonising rule, has a code of 48. The least harmonising pro-user rule has a code of 12, while the most influential pro-user rule would have a code of 1.

We suggest the interpretation that institutions that reach a result higher than 22 exclude "wiggle room" and hinder a bottom-up approach for building institutions. Put differently, we do not learn from differing national experiments with the term of protection of copyrighted works since WTO members are not free to experiment in this regard. The international framework prevents learning from experiments and diverse paths of regulation or competition for regulatory solutions. ⁸⁰

On the other hand, a 10-points rule like Article 11 allows for some experimentation. While TRIPS is often seen as an answer to the costs of regulatory competition, we find here that it allows for such competition as long as user rights are concerned. This makes it possible to improve rules. Such clauses with an open wording have to be cherished and preserved to realize the remaining benefits from regulatory competition despite the vertical integration of "regulatory markets". Accordingly, there is a "sliding scale" of intensity with extremes that are touched upon. 81

The coded visualisation of the harmonizing degree of international rules sharpens the eye for the different regulatory paths that are possible and the consequences of the decision to select one variant over another. Our suggestion for future law-making in this field is that new rules should not reach the extremes but try to find an institution with a code between 6 and 22. This would leave innovative possibilities to member states and the system as a whole.

Of course, this model is not perfect. It is not sophisticated enough to take into account all the complexities of IP law. Besides, every single coding leaves much room for discussion. This is conceded. Yet, this code provides a first institutionally-based tool for analyzing the mechanisms in TRIPS in a sober language. It makes rules comparable, and it looks into some of the details of the ways and means of regulation.

4.2 The Institutional Arrangement: How do Member States Cooperate in TRIPS?

So far, we have only looked at the institutional environment for IP protection, yet we have left aside the institutional arrangement: the meta-structure of TRIPS. The regulatory impact of TRIPS depends upon the working mechanisms of TRIPS as such. If these mechanisms allow for constant change, the framework would be more prone to innovation than if the rules are static over a long period of time.

⁸⁰ W. Kerber (1998), Zum Problem einer Wettbewerbsordnung für den Systemwettbewerb, in K.E. Schenk et al. (Eds.), JNPÖ Band 17: Globalisierung, Systemwettbewerb und national-staatliche Politik, pp. 199, 206.

⁸¹ Cf. J. Gernhuber (1983), § 242 BGB – Funktionen und Tatbestände, 23 JuS 1983, 764, who spoke of a sliding scale of regulation with the general clause marking the extreme of uncertainty.

How do member states cooperate and interact under TRIPS? How are obligations enforced? Is there any room for individual solutions for member states? Can rules be changed easily? All these questions determine whether the rules at play for IP protection are carved in stone or not. The regulatory pressure exerted through commitments in international frameworks may vary considerably. One may distinguish different levels of this institutional arrangement. The TRIPS agreement may be changed by legislation of the TRIPS members. The judiciary may interpret TRIPS and give it a new meaning. The member states may have leeway when implementing the TRIPS obligations. Finally, there may be in-built dynamics within the TRIPS treaty that could bring about change.

4.2.1 Legislative Process

Usually, the legislative process is the right place to react to new factual developments or to update rules. As for TRIPS, the "legislative process" as the usual tool effectively is even more complex ⁸² than on the national level and therefore is rarely ever available. Entering into a new agreement in the WTO is much more complicated than to pass a new statute in national systems. The negotiations at present are complex in the field of IP, to say the least, even though the governance of the new negotiation rounds after Doha has improved.

Yet, in wise anticipation of the difficulties in concluding a new agreement, the TRIPS Council was established as a body to monitor the operation of the TRIPS Agreement (Article 68) and to develop it further.

Actually, this process of amending TRIPS has only been finalized once ever since its first conclusion 20 years ago. The legal document is the Protocol Amending the TRIPS Agreement of 6 December 2005 concerning access to medicines. This protocol needs to be accepted by two thirds of the member states in a formal way, following the procedure foreseen in Article X of the WTO Agreement. The members committed themselves to acceptance by 2007, yet in 2014, the deadline for acceptance was extended to 2015. Nine years after the decision to amend TRIPS, only one third of the members had formally accepted it. This embarrassing anecdote shows that the legislative and the Council process in TRIPS are not frequently used, nor are they effective tools to update obligations. Type the Council still serves as a forum to discuss current problems, identify violations of

⁸² And difficult; see e.g. for the "single undertaking" approach of WTO negotiations: S.E. Rolland (2010), Redesigning the Negotiation Process at the WTO, 13 J. Int'l Econ. L 2010, 65.

⁸³ Decision of the General Council, Amendment of the TRIPS Agreement, WT/L/641, 6 December 2005.

⁸⁴ See the dates of acceptance on the official website of the World Trade Organization, available at: http://www.wto.org/english/tratop_e/trips_e/amendment_e.htm (accessed 19 November 2014).

⁸⁵ Cf. H.P. Hestermeyer (2004), Flexible Entscheidungsfindung in der WTO, 53 GRUR Int. 2004, 194, 200.

TRIPS and—more important for our topic—best practices in member states. It therefore fulfils a pro-innovative function. Its strengthening in this regard may be a viable balance for the lack of formal amendments.

4.2.2 Judicial Interpretation

It is also the task of the judiciary to find topical solutions to conflicts that arise, often due to the fact that the rules in place are not in line with the factual situation in the markets. A judge who is called upon to apply an act to a new case may have the possibility to decide this case according to the norms since these were framed in an abstract way. Framing a law in abstract, general terms is a tool to keep the law open for new developments. In TRIPS, dispute settlement provides for a judicial approach. The dispute settlement mechanism, however, has not yet seen very many TRIPS-related disputes. Up to November 2014, the TRIPS Agreement had been cited in only 34 instances in the request for consultations under the Dispute Settlement Mechanism. In ten cases, the Dispute Settlement Panel had issued a Panel Report, and in only three cases had the Appellate Body given a report on a TRIPS-related issue. This means that in only ten cases over 20 years, has a judicial institution had the opportunity to speak out on the Agreement, interpret it and clarify or subtly change the terms of it.

Graeme Dinwoodie and Rochelle Dreyfuss have explored the possibilities to recalibrate TRIPS through dispute settlement. Reprivate enforcement may play an important role in this regard if private parties have conflicts that are determined by TRIPS obligations and decided by many diverse courts all over the world. Private actions push forward the interpretation of TRIPS and thereby the recalibration of this field of law, opening it up for interpretation. However, if courts do not relate the case to TRIPS obligations (but stay within the realm of national law, which may be sensible to do if there is implementing national law), they will hardly get noticed in the international recalibration efforts and may not contribute to innovating in TRIPS. It should be noted though that some member states allow for the direct application of TRIPS in national court rulings.

⁸⁶ See the website of the WTO on the dispute resolution mechanism, wto.org; for an overview see O. Budzinski & K. Monostori (2012), Intellectual Property Rights and the WTO: Innovation Dynamics, Commercial Copyrights and International Governance, 1 ILR 2012, 108; J. Pauwelyn (2010), The Dog that Barked But Didn't Bite: 15 Years of Intellectual Property Disputes at the WTO. 1 J. Int'l Dispute Settlement 2010, 389.

⁸⁷ According to the WTO Search Engine.

⁸⁸ G.B. Dinwoodie & R.C. Dreyfuss (2009), Designing a Global Intellectual Property System Responsive to Change: The WTO, WIPO and Beyond, NYU School of Law, Public Law Research Paper No. 09–63.

⁸⁹ Cf. G.B. Dinwoodie (2007), The International Intellectual Property System: Treaties, Norms, National Courts, and private Ordering, in D. Gervais (Ed.), Intellectual Property, Trade and Development: Strategies to Optimize Economic Development in a Trips-Plus Era, pp. 61, 93 et seq.

With few cases reaching the Dispute Settlement Body and with little private enforcement visible on a world stage, there is little hope that legislation or court rulings contribute to an update of the rules in TRIPS or "creatively destruct" the TRIPS wisdom.

4.2.3 Implementation

The member states may contribute to finding different solutions within TRIPS (and that means innovation) if they have leeway in the implementation process. Generally, the member states have an obligation to implement the TRIPS obligations into national law. If they do not comply, the sanctioning mechanism of the WTO dispute settlement may be set in motion. ⁹⁰

Yet, the leeway granted to the member states is still considerable. This starts with the ambiguity and openness of some clauses. As pointed out earlier, Article 25 para. 2 for example leaves a lot of room for ideas of implementing nations. The same holds true for other norms in TRIPS.

In cases such as *India – Patents*⁹¹ and *US – Section 301*⁹² the Appellate Body and the Panel of the Dispute Settlement Body had to consider the problem that determining a violation of TRIPS depends upon a double interpretation problem: Firstly, the norms of TRIPS have to be interpreted. This is, for the Dispute Settlement Bodies, a normative task. Secondly, the bodies have to conduct "factual" research concerning the range of meanings of the words employed in municipal legislation.

TRIPS even goes further. Different member states are granted different implementation periods. In particular, developing countries, acceding countries and LDCs may keep TRIPS out of their national system for a while. 93 These different windows take into account that economies have developed to a different degree. 94

4.2.4 In-Built Dynamics

The institutional arrangement of TRIPS is also characterised by tools built into the system in order to make it more open for innovation. Some rules have "evolutionary

⁹⁰ TRIPS is covered by an understanding of the member states, see App. 1 to the Dispute Settlement Understanding, Article 1 No. 1 DSU.

⁹¹ Appellate Body Report, India – Patent Protection for Pharmaceutical and Agricultural Chemical Products, WT/DS50/AB/R, adopted 16 January 1998, DSR 1998:I, p. 9.

⁹² Panel Report, United States – Sections 301 310 of the Trade Act of 1974, WT/DS152/R, adopted 27 January 2000, DSR 2000:II, p. 815.

⁹³ See the official website of the World Trade Organization, available at: http://www.wto.org/english/tratop_e/trips_e/tripfq_e.htm#Who%27sSigned (accessed 19 November 2014).

⁹⁴ Cf. M.R. Hashim (2013), International Influence – TRIPS and Patentable Subject-Matter, IIC 2013, 656, 658 et seq.

clauses" that open up the law for developments, e.g. sunset clauses, opening clauses, alternative choices (as in dispositive norms) or general clauses that give leeway to courts. In particular, Articles 23(4), 24(1), 27(3) lit. b, 64(3) and 71 (1) contain a built-in agenda, an obligation for member states to develop the system of international IP protection further. This is an interesting tool, even though the success of the built-in agenda has so far been limited. 95

Several other factors for TRIPS may be mentioned:

- In the 2014 Declaration on Patent Protection, a group of outstanding IP scholars pointed to the regulatory sovereignty that still remains under TRIPS for member states. The authors spell out "the policy space that the TRIPS Agreement leaves to national legislators and judicial authorities with regard to the implementation and administration of their patent systems". They are driven by the concern that different countries have different socioeconomic benefits and costs from implementing a patent law regime. Accordingly, in particular with a view to the current misgivings regarding the patent law system, the Declaration reads like an encouragement for lawmakers to find their own path again instead of relying on TRIPS. This analysis of patent law in TRIPS starts from the same irritations as we do, showing in utter clearness the space for regulatory innovation and differentiation in one specific field.
- Bilateral and multilateral treaties (in particular free trade agreements (FTAs)) may supersede TRIPS by granting more protection ("TRIPS-plus"). Net exporters of IP try to get better protection by entering into separate agreements, 99 e.g. to get longer terms of protection. The EU practices such FTAs as well. With a view to the dangers of such FTAs, the Max Planck Institute for Innovation and Competition published principles for FTAs with IP relation. 102

⁹⁵ Cf. K. Kaiser (2009), in P.T. Stoll, J. Busche & K. Arend (Eds.), WTO, Article 68, para. 11.

⁹⁶ M. Lamping et al. (2014), Declaration on Patent Protection – Regulatory Sovereignty under TRIPS, 45 IIC 2014, 679.

⁹⁷ Ibid., para. 2.

⁹⁸ B. Lindstrom (2010), Scaling Back TRIPS-Plus: An Analysis of Intellectual Property Provisions in Trade Agreements and Implications for Asia and the Pacific, 42 NYU J. Int.'l L.Pol. 2010, 917, 919; P.K. Yu (2007), The International Enclosure Movement, 82 Ind. L.J. 2007, 827, 867, suggests to distinguish between TRIPS plus, TRIPS extra and TRIPS restrictive in order to mirror more accurately the level of protection that is granted additionally; cf. R.U. Ottawa L. & Tech. J. 2003-2004, 125 et seq.

⁹⁹ See C.M. Correa (2013), High Costs, Negligible Benefits from Intellectual Property Provisions in FTAs, 44 IIC 2013, 902, 904: "a shocking element is the lack of proportion between the high costs imposed on developing countries and the low benefit derived by the intended beneficiaries". ¹⁰⁰ Ibid.

¹⁰¹ Cf. J. Drexl, H. Grosse Ruse-Khan & S. Nadde-Phlix (2014), EU Bilateral Trade Agreements and Intellectual Property.

¹⁰² H. Grosse Ruse-Khan et al. (2013), Principles for Intellectual Property Provisions in Bilateral and Regional Agreements, 44 IIC 2013, 878.

The possibility as such to enter into other agreements means non-exclusivity and allows for experimentation (even if one may regret that).

- Countries may decide to follow an intentional non-compliance strategy ignoring TRIPS obligations. Since enforcement mechanisms differ greatly in effectiveness and since it always requires a lengthy and complex procedure to prove non-compliance, this can be a viable alternative for members. In use of the dispute settlement mechanism, Antigua and Barbados employed non-compliance with TRIPS as a sanction in a trade dispute with the USA. Cross-retaliation with TRIPS obligations was also authorised for Ecuador in the EC Bananas Case. 104
- A number of authors have argued that the setting of minimum standards for IP protection by TRIPS was in conflict with basic needs of the society in countries that are members of the agreement. One way to improve TRIPS might be opening it up to include such issues. But in these countries, economic development in general is also closely connected to the ability to make use of protected technologies. The principles in Articles 7 and 8 TRIPS have been brought forward as possible starting points opening the Agreement further for such ideas. These norms balance the protection of IP with the aim of innovation, access to technology, social and economic welfare, nutrition, distribution of medicine and socioeconomic and technological development. It is unsettled though in how far these norms can be invoked within TRIPS to neutralise some of the more restrictive norms.
- The extraterritorial enforcement of national laws is not regulated under TRIPS.¹⁰⁹

¹⁰³ Decision by the Arbitrator, United States – Measures Affecting the Cross Border Supply of Gambling and Betting Services – Recourse to Arbitration by the United States under Article 22.6 of the DSU, WT/DS285/ARB, 21 December 2007, DSR 2007:X, p. 4163.

¹⁰⁴ Decision by the Arbitrators, European Communities – Regime for the Importation, Sale and Distribution of Bananas – Recourse to Arbitration by the European Communities under Article 22.6 of the DSU, WT/DS27/ARB/ECU, 24 March 2000, DSR 2000:V, p. 2237.

¹⁰⁵ See e.g. F.M. Abbott & J.H. Reichman (2007), The Doha Round's Public Health Legacy: Strategies for the Production and Diffusion of Patented Medicines under the Amended Provisions, 10 J. Int'l Econ. L. 2007, 921, 925 et seq.

¹⁰⁶ C.M. Correa (2013), High Costs, Negligible Benefits from Intellectual Property Provisions in FTAs, 44 IIC 2013, 902, 905; F.M. Abbott (2011), Intellectual Property and Public Health: Meeting the Challenge of Sustainability, Global Health Programme Working Paper No. 7/2011, pp. 5 et seq. at note 65 seems far less optimistic stating that "unless and until governments demonstrate a willingness to employ [... existing mechanisms...], refinement [...] is probably not the best use of diplomatic energies".

¹⁰⁷ K.E. Maskus & J.H. Reichman (2004), The Globalization of Private Knowledge Goods and the Privatization of Global Public Goods, 7 J. Int'l Econ. L. 2004, 279, 311.

¹⁰⁸ J.H. Reichman (2000), The TRIPS Agreement Comes of Age: Conflict or Cooperation With the Developing Countries?, 32 Case W. Res. J. Int'l L. 2000, 441, 446.

¹⁰⁹ O. Budzinski & K. Monostori (2012), Intellectual Property Rights and the WTO: Innovation Dynamics, Commercial Copyrights and International Governance, 1 ILR 2012, 102, 115 argue that initiatives such as SOPA and PIPA are a result of failures of TRIPS.

With a view to the implementation, leeway left to member states and the different opening clauses, *Dinwoodie* and *Dreyfuss* have started to develop a IP-focussed "neofederalist vision" of TRIPS that has not yet been reached.¹¹⁰

4.3 Conclusion

Firstly, the TRIPS regime is an institutional environment for the use of intellectual property that configures the expectations of actors and thereby influences their decisions on different markets. As a legal regime, TRIPS pushes members into conformity regarding the regulation of IP. A more sophisticated look reveals that there are institutions that have a higher push-factor than others, i.e. a general critique needs to distinguish carefully between different clauses of the TRIPS regime. TRIPS knows techniques in law-making to reach distinct results regarding the pressure put on the member states. Generally, however, the minimum standard approach leads to a one-direction-only approach in IP regulation for member states. They may go further in protecting IP, yet they are not allowed to open up the system to strengthen user rights.

Laws are not monolithic blocks that remain unchanged over time. Yet, an analysis of the institutional arrangement of TRIPS has shown that the two main mechanisms to alter the law, legislation and judicial interpretation, are of little value for this international agreement. The legislative process to alter TRIPS is so complex that it is hardly successful; the WTO judiciary only speaks out on rare occasions, private enforcement in national courtrooms rarely happens. Other elements, however, can be identified that open some wiggle room for member states in the implementation of TRIPS and in the application as such.

TRIPS is sensitive towards certain dangers of harmonisation. Opening clauses, balancing approaches and abstract terminology as well as the built-in agenda enable members to find innovative approaches towards IP regulation. Yet, the main thrust of TRIPS is to establish a safe and secure haven for IP protection on a global scale with a well-determined scope of protection, largely in favour of rightsholders.

5 Outlook: Regulatory Innovation in TRIPS

In the preceding sections we suggested that

- legal regimes may be analyzed for their innovative power,
- institutional economics provide a basis for such analysis, and

¹¹⁰G.B. Dinwoodie & R.C. Dreyfuss (2012), A Neofederalist Vision of TRIPS.

 the institutional environment for IP protection under TRIPS and the institutional arrangement of TRIPS press member states to foster the rights of rightsholders, although there are some elements that open up the possibility for member states to find innovative solutions themselves.

When speaking about innovation in this context, we think of new and better solutions. Yet, our approach of opening the leeway for individual solutions by member states also enables these actors to find a solution best suited to them—a regulation that fits into the socioeconomic context.

With its 20 years of existence, TRIPS has passed the status of adolescence and there is a danger of becoming static or non-adaptive or conservative or even backward bound. The alternative vision would be to rejuvenate TRIPS as an innovation-friendly treaty. This would require making TRIPS a "learning" institution that opens up diverse paths for members and allows for some experimentation. This comes close to the vision of *Dinwoodie/Dreyfusson* of a "neofederalist" TRIPS regime. The property of the vision of *Dinwoodie/Dreyfusson* of a "neofederalist" TRIPS regime.

All possibilities of changing TRIPS over time should be strengthened. Such change requires examples and dialogues, or put more harshly: regulatory competition.

This starts with pointing out that there *is* some regulatory space left to member states, just as the Declaration on Patent Protection does.

Dialogue with independent experts and dispute settlement should be sought after more often to discover new, timely interpretations in the wording. Private enforcement in national courtrooms may help.

If law-making is back on the agenda, contributors in the 20-plus years of TRIPS should keep in mind that there is a sliding scale of regulation with rules and principles, with extremes in the pro-rightsholder and the pro-user sphere. Regulatory techniques may be developed further, allowing room for experimentation clauses, options, built-in agendas or sunset clauses. Putting it in the quantitative terms established above, it would be good for new rules to be close to 6–22 on the scale of coded regulation. Maybe it suffices to use abstract terms, and leave the specific details to the implementing jurisdiction and identify best practices in the TRIPS Council. New proposals should focus on the important, the essential points rather than trying to regulate every bit. It might even be possible to scale back protection instead of propelling protection into ever-new heights. This would require easing of the grip of legal certainty and a move toward "maximum flexibility". The fetish of lawmakers with legal certainty is an illusion in many

¹¹¹With examples: J.H. Reichman (2000), The TRIPS Agreement Comes of Age: Conflict or Cooperation With the Developing Countries?, 32 Case W. Res. J. Int'l L. 2000, 457.

¹¹² Cf. G.B. Dinwoodie & R.C. Dreyfuss (2012), A Neofederalist Vision of TRIPS, pp. 5 et seq., referring to it as a "neofederalist regime"; cf. J.H. Reichman (1997), From Free Riders to Fair Followers: Global Competition Under the TRIPS Agreement, 29 NYU J. Int.'l L.Pol. 1997, 26–86.
113 Cf. R.M. Hilty (2015), Ways out of the Trap of Article 1(1) TRIPS, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 185 (this volume).

respects. If legal certainty was less influential it may even be conceivable to change the direction of ever-more protection through TRIPS.

The idea of all this would be to discover new regulatory ideas for intellectual property and to exchange each other's experiences, perhaps in the forum of the TRIPS Council. Some may call this regulatory competition. We would call it the shift to an innovation-friendly, pro-innovation treaty. Innovation or creative destruction in law-making means to learn. If the TRIPS regime is designed in a pro-innovative way, leaving room for legal experimentation respecting a basic need for legal certainty, this would make TRIPS a model for other international treaties. TRIPS as a "learning treaty" is a vision for TRIPS 20-plus.

References

- Abbott, F.M. & Reichman, J.H. (2007), The Doha Round's Public Health Legacy: Strategies for the Production and Diffusion of Patented Medicines under the Amended Provisions, 10 J. Int'l Econ. L. 2007, 921, Oxford: Oxford University Press
- Abbott, F.M. (2011), Intellectual Property and Public Health: Meeting the Challenge of Sustainability, Global Health Programme Working Paper No. 7/2011, available at: www.ssrn.com/abstract=1965458 (accessed 19 November 2014)
- Ambrosius, G. (2005), Regulativer Wettbewerb und koordinative Standardisierung zwischen Staaten, Stuttgart: Franz Steiner Verlag
- von Arnauld, A. (2006), Rechtssicherheit, Tübingen: Mohr Siebeck
- Bahar, D., Hausmann, R. & Hidalgo, C.A. (2012), International Knowledge Diffusion and the Comparative Advantage of Nations, Harvard Kennedy School Working Paper No. RWP12-020, available at: http://ssm.com/abstract=2087607 (accessed 19 November 2014)
- Bora, A. (2009), Innovationsregulierung als Wissensregulierung, in M. Eifert & W. Hoffmann-Riem (Eds.), Innovationsfördernde Regulierung, pp. 23–43, Berlin: Duncker & Humblot
- Brand, O. (2009), in P.T. Stoll, J. Busche & K. Arend (Eds.), WTO Trade-Relevant Aspects of Intellectual Property Rights, Article 8, Leiden: Nijhoff
- Budzinski, O. & Monostori, K. (2012), Intellectual Property Rights and the WTO: Innovation Dynamics, Commercial Copyrights and International Governance, 1 ILR 2012, 102, Toronto: Canadian Center of Science and Education
- Correa, C.M. (2013), High Costs, Negligible Benefits from Intellectual Property Provisions in FTAs, 44 IIC 2013, 902, Munich/Berlin: C.H. Beck/Springer
- Davey, W.J. (2005), The WTO Dispute Settlement System: The First Ten Years, 8 J. Int'l Econ. L. 2005, 17, Oxford: Oxford University Press
- Davis, L.E. & North, D.C. (1970), Institutional Change and American Economic Growth: A First Step Towards a Theory of Institutional Innovation, 30 J. Econ. Hist. 1970, 131, Tucson, AZ: Economic History Association
- Dinwoodie, G.B. (2007), The International Intellectual Property System: Treaties, Norms, National Courts, and private Ordering, in D. Gervais (Ed.), Intellectual Property, Trade and Development: Strategies to Optimize Economic Development in a Trips- Plus Era, pp. 61–114, Oxford: Oxford University Press
- Dinwoodie, G.B. (2007), The WIPO Copyright Treaties: A Transition to the Future of International Copyright Lawmaking?, 57 Case W. Res. L. Rev. 2007, 751, Cleveland: Case Western Reserve University School of Law
- Dinwoodie, G.B. & Dreyfuss, R.C. (2009), Designing a Global Intellectual Property System Responsive to Change: The WTO, WIPO and Beyond, NYU School of Law, Public Law

Research Paper No. 09–63, available at: http://ssrn.com/abstract=1502262 (accessed 19 November 2014)

Dinwoodie, G.B. & Dreyfuss, R.C. (2012), A Neofederalist Vision of TRIPS, Oxford: Oxford University Press

Drexl, J. (2015), The Concept of Trade-Relatedness of Intellectual Property Rights in Times of Post-TRIPS Bilateralism, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles (p. 53), Heidelberg: Springer (this volume)

Drexl, J., Grosse Ruse-Khan, H. & Nadde-Phlix, S. (2014), EU Bilateral Trade Agreements and Intellectual Property: For Better or Worse?, Berlin: Springer

Dworkin, R. (1978), Taking Rights Seriously, Cambridge, Mass.: Harvard University Press.

Eifert, M. (2008), Innovationsfördernde Regulierung, in M. Eifert & W. Hoffmann-Riem (Eds.), Innovationsfördernde Regulierung, pp. 11–19, Berlin: Duncker & Humblot

Erlei, M., Leschke, M. & Sauerland, D. (2007), Neue Institutionenökonomik, 2nd ed., Stuttgart: Schäffer-Poeschel

Esser, J. (1990), Grundsatz und Norm in der richterlichen Fortbildung des Privatrechts, 4th ed., Tübingen: Mohr

Esty, D.C. & Geradin, D. (2000), Regulatory Co-opetition, 3 J. Int'l Econ. L. 2000, 235, Oxford: Oxford University Press

Fikentscher, W. (1975), Methoden des Rechts (Vol. II), Tübingen: Mohr

Fikentscher, W. (1977), Methoden des Rechts (Vol. IV), Tübingen: Mohr

Ganea, P. (2008), TRIPS als Innovationsmotor?, in M. Eifert & W. Hoffmann-Riem (Eds.), Geistiges Eigentum und Innovation, pp. 107–119, Berlin: Dunker & Humblot

Gernhuber, J. (1983), § 242 BGB – Funktionen und Tatbestände, 23 JuS 1983, 764, Munich: C.H. Beck

Götting, H.P. (2014), Gewerblicher Rechtsschutz, 10th ed., München: Beck

Hafner, C. (1998), Systemwettbewerb versus Harmonisierung in Europa, Frankfurt am Main: Lang
 Hashim, M.R. (2013), International Influence – TRIPS and Patentable Subject-Matter, 44 IIC
 2013, 656, Munich/Berlin: C.H. Beck/Springer

von Hayek, F.A. (1968), Der Wettbewerb als Entdeckungsverfahren, Kiel: Institut für Weltwirtschaft

Hestermeyer, H.P. (2004), Flexible Entscheidungsfindung in der WTO, 53 GRUR Int. 2004, 194, Munich: C.H. Beck

Hilty, R.M. (2015), Ways out of the Trap of Article 1(1) TRIPS, in H. Ullrich, R.M. Hilty,
 M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles
 (p. 185), Heidelberg: Springer (this volume)

Hirschman, A.O. (1974), Abwanderung und Widerspruch, Tübingen: Mohr

Hoffman-Riem, W. (2005), Risiko- und Innovationsrecht im Verbund, 38 Die Verwaltung 2005, 145, Berlin: Duncker & Humblot

Hoffmann-Riem, W. (2008), Immaterialgüterrecht als Referenzgebiet innovationserheblichen Rechts, in M. Eifert & W. Hoffman-Riem (Eds.), Geistiges Eigentum und Innovation, pp. 15–41, Berlin: Duncker & Humblot

Kaiser, K. (2009), in P.T. Stoll, J. Busche & K. Arend (Eds.), WTO – Trade-Relevant Aspects of Intellectual Property Rights, Article 68, Leiden: Nijhoff

Kanter, R.M. (1988), When a Thousand Flowers Bloom: Structural, Collective, and Social Conditions for Innovation in Organization, 10 Research in Organizational Behavior 169–211, Kidlington: Elsevier.

Kaplow, L. (1992), Rules Versus Standards: An Economic Analysis, 42 Duke L.J. 1992, 557, Durham: Duke University School of Law

Kaufmann, A. (1962), Gesetz und Recht, in T. Würtenberger, W. Maihofer & A. Hollerbach (Eds.), Existenz und Ordnung – Publication in Honor of Erik Wolff, pp. 357–397, Frankfurt am Main: Klostermann

Kenyon, D.A. (1997), Theories of Interjurisdictional Competition, New Eng. Econ. Rev. 1997, 13, Boston: Federal Reserve Bank

Kerber, W. (1998), Zum Problem einer Wettbewerbsordnung für den Systemwettbewerb, in K.E. Schenk et al. (Eds.), JNPÖ Band 17: Globalisierung, Systemwettbewerb und nationalstaatliche Politik, pp. 199–230, Tübingen: Mohr Siebeck

- Kerber, W. & Budzinski, O. (2003), Towards a Differentiated Analysis of Competition of Competition Laws, ZWeR 2003, 411, Cologne: RWS
- Kozel, R.J. (2014), The Scope of Precedent, 113 Mich. L. Rev. 2014, 179, Ann Arbor, MI: University of Michigan Law School
- Kraßer, R. (2004), Patentrecht, 5th ed., München: Beck
- Kur, A. (2015), From Minimum Standards to Maximum Rules, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles (p. 133), Heidelberg: Springer (this volume)
- Lamping, M. (2015), Intellectual Property Harmonization in the Name of Trade, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles (p. 313), Heidelberg: Springer (this volume)
- Lamping, M. et al. (2014), Declaration on Patent Protection Regulatory Sovereignty under TRIPS, 45 IIC 2014, 679, available at: http://www.ip.mpg.de/en/news/declaration_on_patent_ protection.html (accessed 19 November 2014)
- Lemley, M.A. & Melamed, A.D. (2013), Missing the Forest for the Trolls, 113 Colum. L. Rev. 2013, 2117, New York: Columbia University School of Law
- Lindstrom, B. (2010), Scaling Back TRIPS-Plus: An Analysis of Intellectual Property Provisions in Trade Agreements and Implications for Asia and the Pacific, 42 NYU J. Int.'l L.Pol 2010, 917, New York: New York University School of Law
- Maskus, K.E. & Reichman, J.H. (2004), The Globalization of Private Knowledge Goods and the Privatization of Global Public Goods, 7 J. Int'l Econ. L. 2004, 279, Oxford: Oxford University Press
- Mehde, V. (2005), Wettbewerb zwischen Staaten, Baden-Baden: Nomos
- Menell, P.S. (2002–2003), Envisioning Copyright Law's Digital Future, 46 N.Y.L. Sch. L. Rev. 2002–2003, 63, New York City: New York Law School
- Merges, R.P. (2000), Intellectual Property Rights and the New Institutional Economics, 53 Vand. L. Rev. 2000, 1857, Tennessee: Vanderbilt University Law School
- Morgan, R. (2012), Ensuring Greater Legal Certainty in OHIM Decision-Taking by Abandoning Legal Formalism, 7 J. Intell. Prop. L. & Practice 2012, 408, Oxford: Oxford University Press
- North, D.C. (1990), Institutions, Institutional Change, and Economic Performance, Cambridge: Cambridge University Press
- Ohly, A. (2008), "Patenttrolle" oder: Der patentrechtliche Unterlassungsanspruch unter Verhältnismäßigkeitsvorbehalt?, 57 GRUR Int. 2008, 787, Munich: C.H. Beck
- Okediji, R. (2003–2004), Back to Bilateralism? Pendulum Swings in International Intellectual Property Protection. Okediji (2003–2004), Back to Bilateralism? Pendulum Swings in International Intellectual Property Protection, U. Ottawa L. & Tech. J. 2003–2004, 125, Ottawa: University of Ottawa Faculty of Law
- Osterrieth, C. (2009), Patent-Trolls in Europa braucht das Patentrecht neue Grenzen?, 111 GRUR 2009, 540, Munich: C.H. Beck
- Pauwelyn, J. (2010), The Dog that Barked but didn't Bite: 15 Years of Intellectual Property Disputes at the WTO, 1 J. Int'l Dispute Settlement 2010, 389, Oxford: Oxford University Press Podszun, R. (2014), Wirtschaftsordnung durch Zivilgerichte, Tübingen: Mohr Siebeck
- Podszun, R. (2015), The More Technological Approach: Competition Law in the Digital Economy, in G. Surblyte (Ed.), Competition on the Internet, Berlin: Springer
- Posner, R.A. (2011), Economic Analysis of Law, 8th ed., Austin: Wolters Kluwer Law & Business Reichman, J.H. (1997), From Free Riders to Fair Followers: Global Competition Under the TRIPS Agreement, 29 NYU J. Int.'l L.Pol. 1997, 11, New York: New York University School of Law
- Reichman, J.H. (2000), The TRIPS Agreement Comes of Age: Conflict or Cooperation With the Developing Countries?, 32 Case W. Res. J. Int'l L. 2000, 441, Cleveland: Case Western Reserve University School of Law

- Rognstad, O.A. (2008), The Exhaustion/Competition Interface in EC Law is there Room for a Holistic Approach?, in J. Drexl (Ed.), Research Handbook on Intellectual Property and Competition Law, pp. 427–450, Cheltenham: Edward Elgar
- Rolland, S.E. (2010), Redesigning the Negotiation Process at the WTO, 13 J. Int'l Econ. L. 2010, 65, Oxford: Oxford University Press
- Schumpeter, J.A. (1947), A Creative Response in Economic History, 7 J. Econ. Hist. 1947, 149, Tucson, AZ: Economic History Association
- Schumpeter, J.A. (1976), Capitalism, Socialism and Democracy, 5th ed., London: Routledge
- Swann, G.M.P. (2009), The Economics of Innovation, Cheltenham: Edward Elgar Publishing
- Tidd, J. & Bessant, J. (2013), Managing Innovation. 5th ed., Chichester, W. Sussex: Wiley Tiebout C.M. (1956). A Pure Theory of Local Expenditures. 64 J. Polit. From 1956, 416 Chicago
- Tiebout, C.M. (1956), A Pure Theory of Local Expenditures, 64 J. Polit. Econ. 1956, 416, Chicago: University of Chicago Press
- Ullrich, H. (2015), The Political Foundations of TRIPS Revisited, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles (p. 85), Heidelberg: Springer (this volume)
- Vahrenholt, O. (2011), Marktabgrenzung und Systemwettbewerb, Baden-Baden: Nomos
- Vaish, V. & Haji, M. (2012), Is there a Need to 'Substantially Modify' the Terms of the TRIPS Agreement?, 17 JIPR 2012, 195, New Delhi: NISCAIR
- Vanberg, V. & Kerber, W. (1994), Institutional Competition among Jurisdictions, 5 Constit. Polit. Econ. 1994, 193, Berlin: Springer
- Vertinsky, L. (2012), An Organizational Approach to the Design of Patent Law, 13 Minn. J. L. Sc. & Tech 2012, 211, Minneapolis: University of Minnesota Law School
- Vihanto, M. (1992), Competition Between Local Governments as a Discovery Procedure, 148 JITE 1992, 411, Tübingen: Mohr Siebeck
- Waldron, J. (2008), The Concept and the Rule of Law, NYU Research Paper Series No. 08-50, available at: http://ssrn.com/abstract=1273005 (accessed 19 November 2014)
- Waller, S.W. & Sag, M. (2015), Promoting Innovation, 100 Iowa Law Rev, available at: http://ssrn.com/abstract=2479569 (accessed 19 November 2014)
- Wallot, M. (2015), The Proportionality Principle in the TRIPS Agreement, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles (p. 213), Heidelberg: Springer (this volume)
- Williamson, O.E. (1993), Calculativeness, Trust and Economic Organization, 36 J.L. & Econ. 1993, 453, Chicago: University of Chicago Press
- Yu, P.K. (2007), The International Enclosure Movement, 82 Ind. L.J. 2007, 827, Bloomington: Indiana University Maurer School of Law

Intellectual Property Harmonization in the Name of Trade

Matthias Lamping

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Abstract In order to enjoy credibility and acceptance among those involved, harmonization must be the outcome of a deliberative process with a defined goal, but without a predetermined solution. States need to be clear about the purpose of harmonization and the measures for achieving it; they need to agree about how to handle different needs, priorities and expectations; and they need to be prepared to accept compromises beyond their narrow self-interest. The TRIPS Agreement tells a different story. Countries have learned to live with it, but nobody is entirely happy. In order to make international law more inclusive and responsive to different socio-economic conditions and needs, the TRIPS Agreement needs to be reconceptualized as a market framework regulation that promotes competition and innovation but also allows states to regulate the use of intellectual property in ways that

Dr. Matthias Lamping is Senior Research Fellow at the Max Planck Institute for Innovation and Competition, Munich.

M. Lamping (⋈)

Max Planck Institute for Innovation and Competition, Munich, Germany e-mail: matthias.lamping@ip.mpg.de

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grow out of, and comply with, their own traditions and interests. This ultimately means that the marriage of convenience between trade and intellectual property may have to come to an end.

1 A National Matter, an International Concern

Across most fields of law, the 20th century has witnessed a strong tendency of legislators to seek international convergence in the standards and rules that affect international commercial transactions and trade. Intellectual property (IP) is no exception. As a matter of principle, IP rights are created and defined by national or regional law, whereas competition and innovation have become international at all levels of the value chain. Business activities that used to create capital, jobs and wealth for the domestic economy are outsourced to other parts of the world: research and development is conducted in countries where regulatory conditions are more favourable; manufacturing facilities are moved to countries where labour and factors of production are cheaper. Companies and their sales markets have grown larger than nation states.

This calls for some sort of transnational law and policy coordination, but does it require harmonization? Uniform laws can increase efficiency. They can reduce transaction costs of conducting business in foreign countries and increase legal certainty and stability needed to make informed foreign investment decisions. They can also enhance economies of scale in the administration and governance of IP systems.³ However, uniformity makes the system unresponsive to domestic needs and priorities. What works for one country may not work for another, and what works today may not work tomorrow. Balanced laws may prove dysfunctional

¹ See W. Cornish & K. Liddell (2015), The Origins and Structure of the TRIPS Agreement, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 3 (this volume).

² See H. Ullrich (2015), The Political Foundations of TRIPS Revisited, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 85 (this volume).

³ A considerable number of patent, design and trademark applications are processed in more than one office (see WIPO's "World Intellectual Property Indicators"). It is estimated that about three quarters of what is being examined at large offices like the USPTO and the EPO is repeated elsewhere in the world at some point in time. The problem is that without a full convergence of the requirements of protection and the examination process, applications must be examined autonomously, i.e. without reliance on the results obtained in other offices. Harmonization is thus a prerequisite for most forms of substantive cooperation between offices, such as the mutual recognition and exploitation of search and examination results (ranging from the simple exchange of search reports to the recognition of decisions on the application), and a step towards reducing the offices' steadily growing workload burdens.

under changing circumstances⁴ and uniformity may inhibit legal innovation that is necessary to overcome these dysfunctionalities.⁵ In order to keep track with social, cultural or technological developments, national legislators need to engage in constant legal experimentation.⁶ As a matter of fact, even the IP system itself began as a controversial experiment, i.e. as a countermovement to the rampant medieval privilege system and a departure from the classic hostility to government-awarded "monopolies".⁷ Regulatory competition works against government inefficiencies, biases, and abuse. For a dynamic field of law like intellectual property whose functional efficiency—and ultimately legitimacy—depends on its interaction with socioeconomic framework conditions, the petrification of a deficient or anachronistic legal framework can have devastating consequences.

However, balancing the advantages and disadvantages of uniformity (harmonization) and diversity (regulatory competition) is no longer a national matter. The coalescence of the global economy has turned the regulation of intellectual property

⁴ Copyright in the Internet era is a prime example. Whatever wisdom prevailed in 1994 about copyright protection in the 21st century, the unexpected rise of the information society has overruled most of it. See S. Ericsson (2015), The Commodification of Internet Intermediary Safe Harbors: Avoiding Premature Harmonization around a Suboptimal Standard, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 245 (this volume); G.B. Dinwoodie & R.C. Dreyfuss (2012), A Neofederalist Vision of TRIPS: The Resilience of the International Intellectual Property Regime, pp. 12 et seq., with further examples.

⁵ See R. Podszun & B. Franz (2015), Regulatory Innovation and the Institutional Design of the TRIPS Agreement, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 279 (this volume); J.H. Reichman & R.C. Dreyfuss (2007), Harmonization without Consensus: Critical Reflections on Drafting a Substantive Patent Law Treaty, 57 Duke L.J. 2007, 85, 93; J.F. Duffy (2002), Harmony and Diversity in Global Patent Law, 17 Berkeley Tech. L.J. 2002, 685, 709 et seq.; G.B. Dinwoodie (2006), Some Remarks on the Limits of Harmonization, 5 J. Marshall Rev. Intell. Prop. L. 2006, 596, 601 et seq.; C.R. Frischtak (1993), Harmonization Versus Differentiation in Intellectual Property Right Regimes, in M.B. Wallerstein, M.E. Mogee & R.A. Schoen (Eds.), Global Dimensions of Intellectual Property Rights in Science and Technology, pp. 89 et seq.; for arguments in favour of uniformity, see R. Sherwood (1993), Why a Uniform Intellectual Property System Makes Sense for the World, in M.B. Wallerstein, M.E. Mogee & R.A. Schoen (Eds.), Global Dimensions of Intellectual Property Rights in Science and Technology, pp. 68 et seq.

⁶ Such as efficacy requirements for the patentability of known substances (see Section 3(d) of the Indian Patent Act), compulsory licenses for research tools (see Article 40b of the Swiss Patent Act), purpose-bound protection for genes (see Article 9 of the EU Biotech Directive 98/44/EC), business method patents (see State Street Bank v. Signature Financial Group, Inc., 149 F.3d 1368 (Fed. Cir. 1998)), patents for software (see Diamond v. Diehr, 450 U.S. 175 (1981)) or computer-implemented inventions (see EPO, G 3/08 (Programs for Computers), OJ 1/2011, 10), supplementary protection certificates (see Council Regulation No. 1768/92), motion and sound trademarks (see ECJ, Shield Mark, C-283/01, EU:C:2003:641), three-dimensional trademarks (see ECJ, Apple, C-421/13, EU:C:2014:2070), colour trademarks (see ECJ, Libertel, C-104/01, EU:C:2003:244), texture trademarks, flavour and fragrance trademarks (see In re Clarke, 17 U.S.P. Q.2d 1238 (T.T.A.B. 1990)), ancillary copyrights for sport event organizers or press publishers (see Article 87f of the German Copyright Act), and so forth.

⁷ See M. Lamping (2010), Patentschutz und Marktmacht, pp. 66 et seq.

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and competition into an international concern. The effects of a country's IP policy will not stop at its national borders, nor will a country remain unaffected by repercussions of other countries' policies. Ways must be found to accommodate national interests without frustrating international expectations; the efficiency of global knowledge production and dissemination must be enhanced without encroaching upon national identities and public policies. In order to address the intricacy of these challenges, the TRIPS Agreement must be reconceived as a framework regulation that integrates national innovation markets into the international economic order instead of playing them off against each other.

It is important to recognize that states are no longer only responsible for their own people and economies, and that the days are over where national or even regional markets could be regulated without the involvement of other, multinational public and private actors. Internal market regulation has become a shared responsibility of individual nation states and the international community of states. This responsibility needs to be exercised on the basis of mutual respect for both national and international concerns, which may involve making choices that go beyond a state's narrow self-interest.

2 The TRIPS Agreement in Retrospective

The inclusion of intellectual property in the remit of the WTO was cast in terms of a *conditio sine qua non* to liberalize trade, put a stop to counterfeiting and piracy, and create a "level playing field" for the global production and exploitation of knowledge goods by internalizing jurisdictional externalities that distort the conditions of

⁸ U. Loewenheim (1996), Harmonization and Intellectual Property in Europe, 2 Colum. J. Eur. L. 1996, 481.

⁹ See E. Fox (2003), International Antitrust and the Doha Dome, 43 Va. J. Int'l L. 2003, 911, exploring the dichotomy between national and global antitrust approaches to problems of externalities, legitimate jurisdiction and nationalistic incentives.

interstate competition. ¹⁰ This also comprises an argument about "justice" in terms of fair competition, ¹¹ implying that "adequate" and "effective" IP protection is not just a matter of free trade, but that there is something inherently wrong about capitalizing on positive (jurisdictional) externalities by adopting levels of IP protection below those of trading partners. Despite their own history of copying and free-riding, ¹² developed countries were eager to secure their "comparative advantage" ¹³ as producers and distributors of the good that rules the information age: knowledge.

Countries have learned to live with the TRIPS Agreement, but nobody is entirely happy with it. ¹⁴ For developed countries, the WTO has proven a brake as much as it used to be an accelerator. ¹⁵ After the collapse of the Ministerial Conferences at Seattle in 1999 and Cancún in 2003, most developed countries resorted back to bilateral and regional agreements in order to further their interest in stronger IP

¹⁰ To this end, intellectual property was reinterpreted from an exception (cf. Article XX(d) GATT) to a condition for international trade (see the Punta del Este Declaration of 20 September 1986, and the preamble to the TRIPS Agreement). The economic considerations behind this "trade-relatedness" can be summarized as follows: In a closed economy, intellectual property is protected in order to prevent a market failure caused by the inability of creators and inventors to prevent others from free-riding on their achievements without bearing the costs for research and development. The TRIPS Agreement embraces a similar line of reasoning: In a transnational setting, harmonization is necessary in order to prevent countries from free-riding on the creative and innovative capacities of others while not contributing to the social costs entailed in the development of these capacities (including access restrictions and, concomitantly, higher prices for protected goods and services). This distorts the conditions of interstate competition, because countries with weak IP systems benefit from "positive externalities" created in countries with stronger IP systems. As a result, the aggregated market income generated by the intellectual asset at issue is not distributed according to "market performance". In short, free regulatory competition fails to produce desirable results for technology-exporters, so harmonization is called upon in order to create a "level playing field" by internalizing cross-border externalities. This is also part of the explanation for why the Agreement follows a minimum standards approach. If the main goal is to prevent jurisdictional externalities, there is no need to worry about other countries granting too much protection. However, this is likely to create a vicious circle. As soon as a country raises its level of protection beyond the agreed standards, it creates new positive externalities to its detriment. It will therefore try to induce other states to also raise their level of protection by arguing that the only way to restore fairness of interstate competition and international trade is by adapting minimum standards to those of its own.

¹¹ See D. Leebron (1996), Claims for Harmonization: A Theoretical Framework, 27 Can. Bus. L.J. 1996, 63, 84 et seq.

¹² For references, see infra fn. 79.

¹³D. Ricardo (1821), On the Principles of Political Economy and Taxation, Ch. 7.

¹⁴G.B. Dinwoodie & R.C. Dreyfuss (2012), A Neofederalist Vision of TRIPS: The Resilience of the International Intellectual Property Regime, p. 14.

¹⁵ G. Dutfield (2008), North/South: An Asymmetric Global Market?, in G. Ghidini & G. Genovesi (Eds.), Intellectual Property and Market Power, p. 180.

protection. ¹⁶ In turn, developing countries mostly regret the apparent "horse-trade" they had concluded. ¹⁷ The Ministerial Conference at Doha in 2001 launched the "Doha Development Agenda", in which many developing countries placed great hope. The achievements, however, seem rather modest. ¹⁸ In order to regain their regulatory sovereignty or retain what is left of it, developing countries frequently see themselves constrained to stretch TRIPS flexibilities to their limit by implementing extensive exceptions and limitations—some of them on the brink of what can be squared with the wording of the TRIPS Agreement. ¹⁹

One way or another, the TRIPS Agreement is experiencing a crisis of credibility and acceptance. This crisis is not easy to overcome, since it is deeply rooted in the genesis of the Agreement and in the way it has satisfied or shattered expectations over time. The purpose of the following chapters is to point out the imperatives and limitations of IP harmonization under the name of trade, and to show how this has affected the internalization of the TRIPS Agreement by national policy makers, legislators, courts and ultimately consumers.

¹⁶ See, for example, Article 4(20) of the U.S.-Jordan FTA, restricting the grounds for granting compulsory licenses; Article 14 of the U.S.-Bahrain FTA, providing that trademark protection shall include certification marks; Article 17 of the U.S.-Australia FTA, extending the term of copyright protection to 70 years; for further examples and references, see contributions in J. Drexl, H. Grosse Ruse-Khan & S. Nadde-Phlix (2014), EU Bilateral Trade Agreements and Intellectual Property: For Better or Worse?; H. Grosse Ruse-Khan et al. (2013), Principles for Intellectual Property Provisions in Bilateral and Regional Agreements, 44 IIC 2013, 878.

¹⁷ For a summary of the main concerns, see P.K. Yu (2006), Five Disharmonizing Trends in the International Intellectual Property Regime, in P.K. Yu (Ed.), Information Wealth: Issues and Practices in the Digital Age, Vol. 4: International Intellectual Property Law and Policy, pp. 77 et seq.

¹⁸ See, for example, the Ministerial Declaration adopted after the 4th Ministerial Conference in Doha, WT/MIN(01)/DEC/1 of 20 November 2001, paras. 17 et seq.; Declaration on the TRIPS Agreement and Public Health, WT/MIN(01)/DEC/2 of 20 November 2001; Implementation of Paragraph 6 of the Doha Declaration on the TRIPS Agreement and Public Health, Decision of the General Council of 30 August 2003, WT/L/540 and Corr. 1 of 1 September 2003.

¹⁹ Such as "local working requirements" in patent law. See Declaration on Patent Protection: Regulatory Sovereignty under TRIPS (Version 1.0 of 15 April 2014), p. 9, para. 30; C. Correa (2007), Trade Related Aspects of Intellectual Property Rights: A Commentary on the TRIPS Agreement, pp. 285 et seq.; G.B. Dinwoodie & R.C. Dreyfuss (2012), A Neofederalist Vision of TRIPS: The Resilience of the International Intellectual Property Regime, pp. 41 et seq.

2.1 The Uruguay Round

The TRIPS Agreement has been profoundly shaped by the strategic behaviour of private actors. ²⁰ The driving forces behind the Uruguay Round were export interests of multinational enterprises and mercantilist interests of developed countries. ²¹ These are two sides of the same coin. In order to avoid structural trade losses, developed countries had to protect industry sectors where they enjoyed a comparative advantage. In other words, something had to be done against copyright piracy in the film industry, price competition from generic drug manufacturers and unauthorized use of tobacco trademarks. ²² This has strongly influenced the content of the TRIPS Agreement. ²³

²⁰ See P. Drahos & J. Braithwaite (2002), Information Feudalism: Who Owns the Knowledge Economy?, pp. 1 et seq.; S.K. Sell (2003), Private Power, Public Law: The Globalization of Intellectual Property Rights, pp. 1 et seq.; P. Drahos (1995), Global Property Rights in Information: The Story of TRIPS at the GATT, 13 Prometheus 1995, 6; T.P. Stewart (1993), The GATT Uruguay Round: A Negotiating History (1986-1992), Vol. II: Commentary, pp. 2253 et seq.; M.J. Trebilcock & R. Howse (2002), Regulation of International Trade, pp. 406 et seq.; D. Matthews (2002), Globalising Intellectual Property Rights, pp. 7 et seq.; for a summary, see M. Lamping (2010), Innovationsförderung nach TRIPS: Zwischen progressiver Liberalisierung und regulativem Fundamentalismus, in R. Hilty, T. Jaeger & M. Lamping (Eds.), Herausforderung Innovation, pp. 119, 122 et seq.

²¹ See U.S. House of Representatives (1984), Unfair Foreign Trade Practices – Stealing American Intellectual Property: Imitation is not Flattery (Report prepared by the Subcommittee on Oversight and Investigations of the Committee on Energy and Commerce). The industry coalition that lobbied for the Uruguay Round was mainly composed of U.S. companies. Since domestic markets were either losing purchasing power or becoming increasingly saturated, they sought ways to secure new revenues in foreign - mainly developing - markets in order to compensate the erosion of profits at home. At political level, they kicked down open doors. The U.S. government itself had a vested interest in facilitating trade with developing countries in order to make up the huge trade deficit that it had been facing since the early 70s (mainly due to high imports of oil and consumer products). See R.R. Nelson & G. Wright (1992), The Rise and Fall of American Technological Leadership, 30 JEL 1992, 1931; W. Cornish & K. Liddell (2015), The Origins and Structure of the TRIPS Agreement, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 3 (this volume); H. Ullrich (2015), The Political Foundations of TRIPS Revisited, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 85 (this volume); J. Drexl (2015), The Concept of Trade-Relatedness of Intellectual Property Rights in Times of Post-TRIPS Bilateralism, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 53 (this volume).

²² See W. Kingston (2010), Beyond Intellectual Property: Matching Information Protection to Innovation, pp. 65 et seq.

²³ See the drafts prepared during the Uruguay Round: Annell Draft (MTN.GNG/NG11/W/76 of 23 July 1990), Brussels Draft (MTN.TNC/W/35/Rev.1 of 3 December 1990) and Dunkel Draft (MTN.TNC/W/FA of 20 December 1991); see also T.P. Stewart (1993), The GATT Uruguay Round: A Negotiating History (1986–1992), Vol. II: Commentary, pp. 2264 et seq.; T.P. Stewart (1999), The GATT Uruguay Round: A Negotiating History (1986–1994), Vol. IV: The End Game (Part I), pp. 465 et seq.

However, the lack of acceptance that the Agreement is facing in many developing countries is not only owed to disagreement with the outcome of negotiations, but also to a feeling of discomfort with the process and the way in which conflicts of interest were tackled. In theory, efficient negotiations can be characterized by five conditions: (1) they are deliberative (i.e. the parties accept that no one has privileged access to an allegedly optimal solution that it will push through against all odds); (2) they are transparent and fully informed (i.e. the parties are aware of the consequences of different negotiation outcomes); (3) terms are negotiated at arm's length (i.e. none of the parties exerts undue unilateral pressure);²⁴ (4) concessions are confined to the subject matter of negotiations (i.e. none of the parties influences the outcome of negotiations by persuading the other party into making unrelated trade-offs); and (5) all interests involved are adequately reflected in negotiations and balanced by the parties in all conscience (i.e. the negotiation mandate is based upon a democratic mediation of conflicting interests that takes due account of all private and public policies that may be affected by the agreement that is to be concluded).

The Uruguay Round fell short of these standards of "democratic bargaining". Negotiations were largely non-transparent and over long stretches unrepresentative and non-inclusive; legitimate concerns were swept under the carpet; important compromises were concluded in "Green Room" consultations among likeminded countries. Developing countries were often caught between Scylla and Charybdis: they could either accept the entrenched positions of their developed trading partners or risk being excluded from further negotiations - and ultimately marginalized from international trade. ²⁷

To a large extent, these problems can be alleviated by reforming the negotiation process. Above all, negotiations must be representative in terms of the various interests affected by the negotiation outcomes, they must be transparent with regard to the consequences of various possible outcomes, and they must be free of coercion.²⁸ The most contentious of these is the condition of representation, because it requires the interests represented by national negotiators to be in themselves intrinsically coherent and extrinsically balanced.

²⁴ For a general discussion of this issue, see G.N. Horlick (1994), Sovereignty and International Trade Regulation, 20 Can.-U.S. L.J. 1994, 57.

²⁵ See P. Drahos (2002), Developing Countries and International Intellectual Property Standard-Setting, 7 JWIP 2002, 765; P. Drahos & J. Braithwaite (2002), Information Feudalism: Who Owns the Knowledge Economy?, pp. 133 et seq., 189 et seq.

²⁶ For details, see J.J. Gorlin (1999), An Analysis of the Pharmaceutical-Related Provision of the WTO TRIPS (Intellectual Property Agreement), p. 4.

²⁷ See H. Ullrich (2015), The Political Foundations of TRIPS Revisited, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 85 (this volume).

 $^{^{28}}$ See P. Drahos & J. Braithwaite (2002), Information Feudalism: Who Owns the Knowledge Economy?, pp. 190 et seq.

This touches upon a very fundamental deficit of international law: democratic legitimacy. In democratic systems, legitimacy is based on control. Problems are brought to the attention of legislators by the public while interest groups play a facilitating role. The legislative process is underpinned by checks and balances—i.e. hearings, impact assessments, public consultations, votes, and so forth—ensuring that new laws enjoy a fair amount of public support. Against this background, international law-making looks suspicious.²⁹ For one, there is no international legislature that supervises negotiations and ensures compliance with certain standards of democratic law-making.³⁰ Despite the public's stakes in intellectual property, the international legal framework can be defined without effective public participation.³¹ There is no direct accountability of the delegate that negotiates an international agreement towards the citizen he ultimately serves. As a result, decision-making is largely technocratic and often shows a tendency to advance the agendas of special interest groups instead of implementing the national consensus on a given issue.³²

The actual challenge lies in efficiently organizing heterogeneous interest groups. It is no secret that the public interest is chronically underrepresented at a political level. Industry coalitions are generally better organized and more influential than other civil society groups. During the Uruguay Round, there was virtually nobody—or rather nobody sufficiently organized—that could have balanced the influence of the multinational corporations that initiated negotiations in the first place. It was not until the late 1990s that other actors with countervailing interests entered the stage and started to shake the "compromise" that had been reached with the TRIPS Agreement.³³

²⁹ See E.A. Posner (2009), The Perils of Global Legalism, pp. 28 et seq.

³⁰ Indeed, there are specialized institutions involved in the negotiation of "global collective action" matters (such as, in the field of intellectual property, WTO and WIPO), but they do little more than providing institutional support.

³¹ See S.A. Shapiro (2002), International Trade Agreements, Regulatory Protection, and Public Accountability, 54 Admin. L. Rev. 2002, 436, 440 et seq., discussing the issue in the context of the United States.

³² See P.B. Stephan (1999), The Futility of Unification and Harmonization in International Commercial Law, 39 Va. J. Int'l L. 1999, 743; A. Reich (2014), The WTO as a Law-Harmonizing Institution, 25 U. Pa. J. Int'l L. 2014, 321, 365.

³³Like special interest groups (e.g. generic drug manufacturers and associations), other civil society groups (e.g. NGOs, indigenous people or farmer's representatives), and international institutions (e.g. WHO, UNCTAD or OECD). At the same time, consensus among developed countries and among industry coalitions started crumbling. Several unresolved issues became manifest, like the role of moral rights in copyright law, the scope of protection for geographical indications or the admissibility of border seizures. It is no coincidence that most of the disputes before the WTO's Dispute Settlement Body (DSB) were between developed countries and not, as one might expect, between developing and developed ones. See D. Matthews (2002), Globalising Intellectual Property Rights, pp. 105 et seq.

2.2 The Aftermath

The conclusion of the TRIPS Agreement forced most developing countries to make substantial amendments to national law and practice, both within the field of intellectual property as well as in related fields. In turn, most developed countries were not affected by legislative changes and associated adaptation costs. From the very beginning, their intention was never to make different countries' laws look the same, but to make other countries' laws look like theirs. In other words, the goal was not to promote harmony but to impose uniformity at the level of protection then applicable in industrialized countries.

This is bound to create conflicts of interests, which in turn create problems of acceptance and obstacles to internalization. Intellectual property systems are regulatory institutions. As such, they are deeply entrenched in domestic culture. Countries have different views on the goals of their IP systems (such as promoting local innovation, attracting foreign investment, facilitating dissemination and distribution, supporting domestic industries, generating trade gains, or avoiding trade losses).³⁷ Depending on their level of development, they also have different views on the priorities of these systems and the optimal level of protection. Last but not least, states have different views on the nature of intellectual "property", ³⁸ its legal quality, as well as its status within the canon of constitutional rights.³⁹

³⁴G.B. Dinwoodie (2000), The Integration of International and Domestic Intellectual Property Lawmaking, 23 Colum.-VLA J.L. & Arts 2000, 307, 309.

³⁵With regard to border measures, for example, the TRIPS Agreement even extended protection beyond the level applicable in some industrialized countries.

³⁶ See H. Ullrich (1996), Technology Protection According to TRIPS: Principles and Problems, in F.-K. Beier & G. Schricker (Eds.), From GATT to TRIPS: The Agreement on Trade-Related Aspects of Intellectual Property Rights, p. 374; K. Saggi & J.P. Trachtman (2011), Incomplete Harmonization Contracts in International Economic Law, 10 World Trade Rev. 2011, 63, 85 et seq.

³⁷ See Declaration on Patent Protection: Regulatory Sovereignty under TRIPS (Version 1.0 of 15 April 2014), p. 3, para. 1.

 $^{^{38}\}mbox{For a general discussion, see P. Drahos (1996), A Philosophy of Intellectual Property, pp. 1 et seq.$

³⁹ On the latter aspect, see K.D. Beiter (2015), Establishing Conformity between TRIPS and Human Rights: Hierarchy in International Law, Human Rights Obligations of the WTO and Extraterritorial State Obligations under the International Covenant on Economic, Social and Cultural Rights, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 445 (this volume).

2.2.1 Implementing the Agreement

Creating common rules is not nearly as difficult as ensuring their common understanding. 40 Culture derives from history, and so do the institutions that culture embraces, such as the law. Laws encode experience, they embody a specific *Weltanschauung*, and are thus never axiologically neutral. 41 To really understand a legal system, "you have to know where it comes from and what its image of itself is". 42 All of what stands behind the law as a social institution, and what ultimately guides the understanding of rules, fades away unless those who are supposed to apply the law have internalized its deeper legal and cultural meaning. A simple "cut-and-paste" of international—originally foreign—legal rules will thus rarely produce the desired convergence effects, because they are intrinsically incomplete. It is the context that sustains the essence of a law, not its wording. This is why legal transplants tend to suffer from a "Chinese whisper" effect: whatever law is transferred is not likely to be the law that is received. Once a law is divorced from its original context and transplanted into another legal order, it tends to develop a momentum of its own.

The acceptance of the TRIPS Agreement in developing countries suffered from this intrinsic incompleteness. Countries had to implement a specific set of legal rules without having internalized their deeper legal meaning. As a result, the Agreement was conceived as little more than a set of alien laws imposed by distant policy elites, and thus had little impact on actual behaviour.

Further problems arised regarding the established coherence and consistency of national legal systems. Harmonization is always somewhat arbitrary, since it usually only covers a limited field of law and, even within that field, only those elements where countries reach agreement. This is likely to have repercussions in related fields of law, such as procedural law (e.g. damages and injunctive relief), state aid law (e.g. public research), contractual law (e.g. licensing), antitrust, regulatory law (e.g. price regulation and marketing restrictions), or unfair compe-

⁴⁰This discussion is particularly well developed in international sales law. See C.B. Andersen (2005), The Uniform International Sales Law and the Global Jurisconsultorium, 24 J.L. & Com. 2005, 159; R. Goode (1993), Reflections on the Harmonization of Commercial Law, in R. Cranston & R. Goode (Eds.), Commercial and Consumer Law: National and International Dimensions, pp. 1 et seq.; M.F. Sturley (1989), International Uniform Law in National Courts: The Influence of Domestic Law in Conflicts of Interpretation, 27 Va. J. Int'l L. 1989, 729.

⁴¹ P. Legrand (1996), European Legal Systems Are Not Converging, 45 Int'l & Comp. L.Q. 1996, 52, 56 et seq.

⁴² J. Merryman (1987), Letter to the Editor: Civil Law Tradition, 35 A. J. Comp. L. 1987, 438, 439.

tition law (e.g. passing off). 43 Unless these fields are sufficiently coordinated with one another, partial harmonization might in fact produce more distortion than harmony. 44

Path dependence is also an issue. The IP regime that a country has at any point in time is inextricably linked to past experiences. Despite the forces of globalization, differences between national laws and practices will temporarily persist due to the simple fact that every legislator is "locked-in by historical events" to some extent. 46

2.2.2 Living the Agreement

Unlike prior conventions governing intellectual property (namely the Paris and the Berne Conventions), which operated on the basis of national treatment and thus left national regulatory sovereignty largely intact, the TRIPS Agreement broke new ground. It introduced a very concrete notion of intellectual property attribution into international law.⁴⁷ The preamble to the Agreement recognizes that IP rights are "private rights", thereby implying that they are to be protected by some sort of "property" right. In fact, the TRIPS Agreement even dictates to states how they ought to define these property rights in terms of protectable subject matter and

⁴³ Consider, for example, third-party entitlements to use protected subject matter. In contrast to common law, most civil law traditions are not used to applying equity principles. In the absence of exceptional circumstances, the finding of an infringement is automatically followed by an order of injunctive relief. The situation is different in most common law countries. Notwithstanding the statutory right to exclude, injunctions are subject to an equity assessment that not only encompasses an *inter partes* balance of hardships but also *erga omnes* effects for the market and even the public interest (see, for example, eBay, Inc. v. MercExchange, L.L.C., 547 U.S. 388 (2006)). It is thus easy for these countries to be restrictive with regard to the grounds and modalities of compulsory licenses (see, for example, Article 4(20) of the U.S.–Jordan FTA), but for civil law countries that are innately less flexible when it comes to balancing interests in the context of enforcement, granting a compulsory license may be crucial for delivering justice.

⁴⁴ D.W. Leebron (1996), Claims for Harmonization: A Theoretical Framework, 27 Can. Bus. L.J. 1996, 63, 106; G. Teubner (1998), Legal Irritants: Good Faith in British Law or How Unifying Law Ends Up in New Differences, 61 Mod. L. Rev. 1998, 11.

⁴⁵ W.B. Arthur (1989), Competing Technologies, Increasing Returns, and Lock-In by Historical Events, 99 Econ. J. 1989, 116.

⁴⁶ See L.A. Bebchuk & M.J. Roe (2000), A Theory of Path Dependence in Corporate Governance and Ownership, 52 Stanford L. Rev. 2000, 127.

⁴⁷ A rather extreme but eye-catching example is Asia, where the duplication of literary works was traditionally – in fact, for centuries – perceived as making something valuable available to the public and thereby honouring the author, and not as a form if intellectual property "theft". It is quite unlikely that this has hampered the development or constrained the diversity of Asia's cultural heritage.

exclusions thereto, requirements of protection, scope of exclusivity and limitations thereto. 48

In many developing countries, this led to a privatization of knowledge that used to be part of the public domain and thus freely available to everyone. It is therefore not surprising that the Agreement was not embraced with equal enthusiasm in all countries. It is easy to overestimate the importance of IP protection if one looks at it from the perspective of an industrialized economy in the midst of its information age. However, with little or no prospect of gaining a comparative advantage in innovation and creativity, a country has "little or no interest in protecting intellectual property rights in products of which it is solely an imitator and intends to remain so".⁴⁹

The actual problem behind the lack of acceptance is a lack of conviction by states and consumers that it may eventually be for their own good to protect and respect intellectual property. National laws may have been amended to comply with TRIPS provisions, but a change of law is not a change of heart. The concept of intellectual property conveyed through the TRIPS Agreement remains truncated unless it has been internalized by civil society, meaning that it is no longer followed "out of a desire to attain a reward or avoid punishment" but because it is accepted as a "behavioural norm". The strength of laws "does not lie in the sanctions, in the protective power of the state which enforces them, but in the individual's readiness to obey them, i.e. in the individual's moral will". Hence, besides political participation, the acceptance and legitimacy of international law requires the public's conviction that it truly advances their interests and respects their values.

⁴⁸ See G.J. Mossinghoff (2000), National Obligations under Intellectual Property Treaties: The Beginning of a True International Regime, 9 Fed. Circuit B.J. 2000, 591, 603, noting that the TRIPS Agreement "tells all countries – developed, developing and least-developed – what they must do and when and how they must do it" (emphasis in original).

⁴⁹ M.J. Trebilcock & R. Howse (2002), Regulation of International Trade, p. 314; see also K.E. Maskus & J.H. Reichman (2005), The Globalization of Private Knowledge Goods and the Privatization of Global Public Goods, in K.E. Maskus & J.H. Reichman (Eds.), International Public Goods and Transfer of Technology under a Globalized Intellectual Property Regime, p. 10. ⁵⁰ S.K. Sell (1998), Power and Ideas: North-South Politics of Intellectual Property and Antitrust, p. 177.

⁵¹G.A. Manne & S. Weinberger (2012), International Signals: The Political Dimension of International Competition Law, 57 Antitrust Bull. 2012, 485, 540.

⁵² K.R. Popper (1945), The Open Society and its Enemies, Vol. I: The Spell of Plato, p. 101.

⁵³ See supra Sect. 2.1.

⁵⁴ E.A. Posner (2009), The Perils of Global Legalism, p. 35.

2.2.3 Squaring It with Public Policies

In terms of its "transferability" from one jurisdiction to another, legal institutions range somewhere between being "mechanical" and "organic". ⁵⁵ Mechanical laws can be insulated from their context and are thus relatively easy to implement into another legal system. Organic laws, in turn, are deeply embedded in culture, society and politics. They are much more difficult to replicate.

In principle, market framework regulations like IP law would be considered mechanical rather than organic, since the basic rules of a market economy are more or less the same everywhere. What makes IP law organic is its cross-cutting nature, i.e. its ties with other socio-economic systems, each with their own internal dynamics and established synergies between one another. ⁵⁶ Intellectual property protection must be aligned with the attainment of other public policies such as economic development, food security and nutrition, health and environmental protection, education, biodiversity, the preservation of traditional knowledge, basic science, and so forth. These systems can easily be irritated unless sufficient margins for flexible application are provided. Without regulatory flexibility, it is impossible to maintain the social bargain that the IP system is supposed to produce.

In order to alleviate potential governance problems, Article 8 of the TRIPS Agreement embeds IP protection into a system of socio-economic policy controls. However, it then again makes them subject to compliance with the Agreement.⁵⁷ If this was to be interpreted restrictively—i.e. literally—it would virtually create a

⁵⁵ See O. Kahn-Freund (1974), On Uses and Misuses of Comparative Law, 37 Mod. L. Rev. 1974, 1. Kahn-Freund's analysis draws on Montesquieu's perception that laws "should be so appropriate to the people for whom they are made that it is very unlikely that the laws of one nation can suit another. Laws must relate to the nature and the principle of the government that is established or that one wants to establish, [...] to the way of life of the peoples, [...] to the degree of liberty that the constitution can sustain, to the religion of the inhabitants, their inclinations, their wealth, their number, their commerce, their mores and their manners; finally, the laws are related to one another, to their origin, to the purpose of the legislator, and to the order of things on which they are established" (Montesquieu (1777), Complete Works, Vol. 1: The Spirit of Laws, Book I, Ch. 3). Montesquieu uses examples from Greek and Roman law in order to illustrate how the transplantation of identical laws from one culture to another can have a myriad of effects – desirable in one case and fatal in the other (ibid., Book XXIX, Chs VI et seq.). He concludes that laws can neither be easily separated from "the end for which they were made" nor from "the circumstances in which they were made" (ibid., Book XXIX, Chs. XIII and XIV).

⁵⁶ For a different context, see P.C. Zumbansen (2006), Spaces and Places: A Systems Theory Approach to Regulatory Competition in European Company Law, 12 ELJ 2006, 534; G. Teubner (1998), Legal Irritants: Good Faith in British Law or How Unifying Law Ends Up in New Differences, 61 Mod. L. Rev 1998, 11.

⁵⁷Both paragraphs of Article 8 TRIPS are only applicable to the extent that "measures are consistent with the provisions of this Agreement" (emphasis added).

hierarchy between IP protection and other public policies.⁵⁸ Such a unilateral declaration of hierarchy would neither be compliant with public international law nor does the negotiating history in any way indicate that this was intended by the drafters of the TRIPS Agreement. As a matter of principle, the Agreement requires states to protect intellectual property according to specific "minimum standards", but it does not—and cannot—alter the role and constitutional status of intellectual property in relation to other national policies. The only thing that international law can control in that regard is the abuse of discretionary powers.⁵⁹

And yet, disputes over the threat of intellectual property for "essential public goods" have been on the agenda ever since the TRIPS Agreement came into force. The "Doha Declaration" was celebrated as a remarkable success although it does little more than stating the obvious: "The TRIPS Agreement does not [...] prevent Members from taking measures to protect public health." Under certain circumstances, protecting public health may require a violation of TRIPS provisions, while it remains unsettled whether the end may then justify the means. This obviously creates legal uncertainty and ultimately jeopardizes the Agreement's credibility.

⁵⁸ For an interpretation of the "consistency-test" in Article 8 TRIPS that avoids this, see Declaration on Patent Protection: Regulatory Sovereignty under TRIPS (Version 1.0 of 15 April 2014), p. 13, para. 1.3.

⁵⁹ The Indian dispute between Natco and Bayer (cf. Supreme Court of India, Natco Pharma Ltd. v. Union of India & Others, Civil Appeal No. 2728 of 2013) may be such a case. Here, the Indian generic drug manufacturer Natco was granted a compulsory license for a cancer drug that was sold by Bayer at a price of more than 40 times the projected average per capita income in India. The license was granted on the ground that the drug was not "reasonably affordable" for national consumers. Despite the initial sympathy that one may have for the decision, doubts remain. As a matter of principle, public interest battles should not be fought on the back of the IP system - nor are they suitable for civil proceedings between private parties. Unless this is seen as part of some sort of "corporate social responsibility" (see F. Henning-Bodewig (2015), TRIPS and Corporate Social Responsibility: Unethical Equals Unfair Business Practices?, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 701 (this volume)), it is not incumbent upon private actors to secure affordable access to essential medicines, but rather the state's responsibility towards its citizenry. Unless high prices constitute an antitrust violation (i.e. an abuse of market power), companies are free to determine their price and distribution policy even if that means that the average national consumer will not be able to afford the respective products. If medicines are sold at arguably excessive prices, it is therefore up to the state to cover for the difference to what it considers "reasonably affordable".

⁶⁰ Declaration on the TRIPS Agreement and Public Health, WT/MIN(01)/DEC/2 of 20 November 2001.

2.3 Twenty Years Later

Protecting intellectual property is costly—not only in terms of the economic inefficiencies associated with granting exclusive rights over "public goods" (i.e. access restrictions and higher market prices), but also in terms of institutional structures. Developing countries condoned the social costs and potential sources of conflict involved in the implementation of the TRIPS Agreement, trusting that they would receive a return for their efforts and sacrifices in the form of market access (mainly to textile, apparel and agriculture markets) and technology transfer (mainly through trade in capital and technology goods, foreign direct investments and licensing). The same property is constituted in terms of the economic inefficiency of the economic forms of the economic public goods.

Twenty years later, most of them are still waiting for that return. It remains uncertain whether the reciprocal gains that developing countries have received outweigh the costs. Economists agree that increasing the level of IP protection in developing countries has affected international trade in some way,⁶⁶ but there is

⁶¹ For a general introduction into the public goods theory, see P.A. Samuelson (1954), The Pure Theory of Public Expenditure, 36 Rev. Econ & Stat. 1954, 387; for its application to intellectual property, see K. Arrow (1962), Economic Welfare and the Allocation of Resources for Invention, in R. Nelson (Ed.), The Rate and Direction of Inventive Activity, pp. 609 et seq.; C. Taylor & Z. Silberston (1973), The Economic Impact of the Patent System, p. 24; F. Machlup (1983), Knowledge, Vol. III: The Economics of Information and Human Capital, p. 160.

⁶² Setting up a system of administration (e.g. patent and trademark offices, collecting societies) and enforcement (e.g. specialized courts, customs authorities) is costly and ties up resources that may otherwise be allocated more efficiently.

⁶³ See supra Sect. 2.2.

⁶⁴ T. Dreier (2007), Shaping a Fair International IPR-Regime in a Globalized World, in I. Govaere & H. Ullrich (Eds.), Intellectual Property, Public Policy, and International Trade, p. 50; G.B. Dinwoodie & R.C. Dreyfuss (2012), A Neofederalist Vision of TRIPS: The Resilience of the International Intellectual Property Regime, p. 32; K.E. Maskus (2012), Private Rights and Public Problems: The Global Economics of Intellectual Property in the 21st Century, p. 95, with further references.

⁶⁵ K.E. Maskus & J.H. Reichman (2005), The Globalization of Private Knowledge Goods and the Privatization of Global Public Goods, in K.E. Maskus & J.H. Reichman (Eds.), International Public Goods and Transfer of Technology under a Globalized Intellectual Property Regime, p. 11.
⁶⁶ See K.E. Maskus & M. Penubarti (1995), How Trade-Related are Intellectual Property Rights?, 39 J. Int'l Econ. 1995, 227; C.A.P. Braga (1996), Trade Related Intellectual Property Issues: The Uruguay Round and its Economic Implications, in W. Martin & L.A. Winters (Eds.), The Uruguay Round and Developing Countries, p. 381; K.E. Maskus & M. Penubarti (1997), Patents and International Trade: An Empirical Study, in K.E. Maskus et al. (Eds.), Quiet Pioneering: Robert M. Stern and His International Economic Legacy, p. 114; C. Fink & C.A.P. Braga (1999), How Stronger Protection of Intellectual Property Rights Affects International Trade Flows, World Bank Policy Research Working Paper 205; L. Branstetter, C.F. Foley & K. Saggi (2010), Has the Shift to Stronger Intellectual Property Rights Promoted Technology Transfer, FDI, and Industrial Development?, 2 WIPO J. 2010, 93; K.E. Maskus (2012), Private Rights and Public Problems: The Global Economics of Intellectual Property in the 21st Century, p. 25.

little consensus as to the distribution of benefits between developed and developing countries. Although empirical evidence supports the view that stronger IP protection can be associated with an increase in foreign direct investments and licensing,⁶⁷ there are not many signs of increased domestic innovation, technology transfer or learning spillovers in most developing and least developed countries.⁶⁸ The TRIPS Agreement was propagated as redemption from the economic problems of the developing world,⁶⁹ but at the bottom line it has mainly served mercantilist interests of advanced economies. It has certainly increased trade flows, but it remains an open question whether that has actually contributed to economic and technological development in developing countries. Since the overwhelming bulk of intellectual property is created and held in industrialized countries, it may have even increased the "development gap" rather than reducing it.⁷⁰

This does not come as a surprise. As a matter of principle, IP protection does not guarantee progress—and *more* protection certainly does not guarantee *more* progress. Intellectual property rights are not supposed to promote innovation or secure investments. They only protect market opportunities. This protection is not about providing incentives, but about preventing the incentives which are inherent in the market from being suppressed due to "free-riding", i.e. due to the inability of the market to allocate market revenues according to market performance. Thus, IP protection can stabilize innovation and creativity, but it is only one piece of the puzzle. The actual incentives are borne from competition, not from protection. By the same token, IP protection does not guarantee technology transfer. Strong IP rights can be an effective means of supporting foreign direct investment and

⁶⁷ See P.J. Smith (2001), How Do Foreign Patent Rights Affect U.S. Exports, Affiliate Sales and Licenses?, 55 J. Int'l Econ. 2001, 411; A.J. Glass & K. Saggi (2002), Intellectual Property Rights and Foreign Direct Investment, 56 J. Int'l Econ. 2002, 387; L.G. Branstetter et al. (2007), Intellectual Property Rights, Imitation, and Foreign Direct Investment: Theory and Evidence, NBER Working Paper 13033.

⁶⁸ K.E. Maskus (2012), Private Rights and Public Problems: The Global Economics of Intellectual Property in the 21st Century, p. 314.

⁶⁹ D. Gervais (2014), Current Issues in International Intellectual Property Norm-Making, in J. Drexl, H. Grosse Ruse-Khan & S. Nadde-Phlix (Eds.), EU Bilateral Trade Agreements and Intellectual Property: For Better or Worse?, p. 5.

⁷⁰R. Newfarmer et al. (2002), Global Economic Prospects and the Developing Countries: Making Trade Work for the World's Poor (World Bank Report), pp. 129 et seq.; P. McCalman (2001), Reaping What You Sow: An Empirical Analysis of International Patent Harmonization, 55 J. Int'l Econ. 2001, 161; C.M. Correa (2005), Can the TRIPS Agreement Foster Technology Transfer to Developing Countries?, in K.E. Maskus & J.H. Reichman (Eds.), International Public Goods and Transfer of Technology under a Globalized Intellectual Property Regime, pp. 227, 229 et seq.

⁷¹ See also infra Sect. 3.2.1.

⁷² See E. Kantzenbach (1967), Die Funktionsfähigkeit des Wettbewerbs, pp. 16 et seq.

inbound licensing, but they are only one element in a far broader set of influences that define the attractiveness of a business environment (including politics, taxation, investment regulation, trade and labour policy, and competition law). Unfortunately, the fallacy of "more protection equals more innovation"—or, in other words, the impression that the state is better in promoting creativity and innovation than the market—has been influencing policy makers in developed countries for decades, 4 and has thus naturally been transmitted to the international level.

Empirical evidence about the impact of IP protection on economic growth in different stages of development is rare. However, history speaks a rather clear language. It is an historical fact that the level of IP protection declines "as economies move beyond the poorest stage into a middle-income stage in which they have greater abilities to imitate" and then increases again as they become "more innovative at the highest level of income". Countries must at least move into the middle-income bracket in order to derive benefit from IP protection. In their own best interest, most developing countries would therefore protect intellectual property at a level that is lower than what their more advanced trading partners consider "effective" or "adequate". From that perspective it seems questionable, if not hypocritical, to argue that the protection today's developed countries ignored during their period of industrialization supports the economic development of today's developing countries. This creates a problem of credibility. After all, just as imitation is an integral part of innovation in terms of dynamic competition, loading the protection to the possibilities of laggard states to free-ride

⁷³ K.E. Maskus (1998), The Role of Intellectual Property Rights in Encouraging Foreign Direct Investment and Technology Transfer, 9 Duke J. Comp. & Int'l L. 1998, 109; for empirical evidence, see E. Mansfield (1993), Unauthorized Use of Intellectual Property: Effects on Investment, Technology Transfer, and Innovation, in M.B. Wallerstein, M.E. Mogee & R.A. Schoen (Eds.), Global Dimensions of Intellectual Property Rights in Science and Technology, p. 140.

⁷⁴ See, for example, European Commission (2011), A Single Market for Intellectual Property Rights: Boosting Creativity and Innovation to Provide Economic Growth, High Quality Jobs and First Class Products and Services in Europe, COM(2011) 287, which is littered with assumptions about the positive impact of strong IP protection on creativity and innovation.

⁷⁵ K.E. Maskus (1998), The International Regulation of Intellectual Property, 134 Weltwirtschaftliches Archiv 186, 192; see also B.Z. Khan (2002), Intellectual Property and Economic Development: Lessons from American and European History, IPR Commission Study Paper 1a; N. Kumar (2002), Intellectual Property Rights, Technology and Economic Development: Experiences of Asian Countries, IPR Commission Study Paper 1b.

⁷⁶R. Newfarmer et al. (2002), Global Economic Prospects and the Developing Countries: Making Trade Work for the World's Poor (World Bank Report), pp. 139 et seq.

 $^{^{77}}$ R.P. Merges (1990), Battle of Lateralisms: Intellectual Property and Trade, 8 B.U. Int'l L.J. 1990, 245; C. May (2003), Why IPRs are a Global Issue, 25 EIPR 2003, 3.

⁷⁸ See J.M. Clark (1940), Toward a Concept of Workable Competition, 30 Amer. Econ. Rev. 1940, 241; J.A. Schumpeter (1942), Capitalism, Socialism and Democracy, pp. 83 et seq.; E. Heuss (1965), Allgemeine Markttheorie, pp. 25 et seq.; J.M. Clark (1961), Competition as a Dynamic Process, pp. 178 et seq.; for a summary, see M. Lamping (2010), Patentschutz und Marktmacht, pp. 12 et seq.

on—or, to put it in positive terms, to learn from—the cultural and technological achievements of the vanguards.

Developed countries enjoyed their freedom to copy during their period of development, 79 and they may even wish it back one day if they find themselves falling behind in strategic industry sectors. 80 The transfer of technology that goes along with the relocation of research, development and production facilities may create serious competition on behalf of countries that were formerly regarded as technology importers. In terms of global efficiency, this is obviously desirable. However, for developed economies, the migration of innovation capacities may have serious consequences for their competitiveness. They will have to decide how they want to play the game.

Leaving aside the complex political economy of the TRIPS Agreement, one would at least expect the elevation of IP standards in developing countries to have reduced counterfeit and piracy. After all, this was—at least originally—one of the main arguments for initiating trade negotiations. Strangely enough, this does not seem to be the case. Both counterfeiting and piracy continue to be on the rise—not

Protection? The Lessons of History, 23 Prometheus 2005, 131, 144.

⁷⁹ The most prominent example is the Swiss pharmaceutical industry, which would probably not assume the leading role that it enjoys today if it was not for the lack of patent protection in Switzerland until the early 20th century. This made it possible to "free-ride" on the achievements of the more advanced German chemical industry, where the patent system was introduced in 1877. See J. Tanner (1998), The Swiss Pharmaceutical Industry: The Impact of Industrial Property Rights and Trust in the Laboratory, 1907-1939, in A.S. Travis et al. (Eds.), Determinants in the Evolution of the European Chemical Industry, 1900–1939, p. 257; C. Simon (1998), The Rise of the Swiss Chemical Industry Reconsidered, in E. Homburg, A.S. Travis & H.G. Schröter (Eds.), The Chemical Industry in Europe, 1850–1914: Industrial Growth, Pollution, and Professionalization, pp. 17 et seq. For more examples, see J.H. Reichman (2009), Compulsory Licensing of Patented Pharmaceutical Inventions: Evaluating the Options, 37 J.L. Med. & Ethics 247; G. Dutfield & U. Suthersanen (2005), Harmonisation or Differentiation in Intellectual Property Protection? The Lessons of History, 23 Prometheus 2005, 131, 135 et seq.; H.-J. Chang (2002), Kicking Away the Ladder: Development Strategy in Historical Perspective, pp. 13 et seq.; L. Kim (2002), Technology Transfer and Intellectual Property Rights: Lessons from Korea's Experience, UNCTAD/ICTSD Working Paper 2002; H.-J. Chang (2001), Intellectual Property Rights and Economic Development: Historical Lessons and Emerging Issues, 2 J. Hum. Dev. 2001, 288; J.H. Reichman (1996), From Free Riders to Fair Followers: Global Competition Under the TRIPS Agreement, 29 NYU J. Int'l L. & Pol. 1996, 11; C. Johnson (1995), Japan: Who Governs? The Rise of the Developmental State, pp. 74 et seq.; J.A. Ordover (1991), A Patent System for Both Diffusion and Exclusion, 5 J. Econ. Persp. 1991, 43; D.J. Jeremy (1981), Transatlantic Industrial Revolution: The Diffusion of Textile Technologies between Britain and America, pp. 8 et seq. ⁸⁰G. Dutfield & U. Suthersanen (2005), Harmonisation or Differentiation in Intellectual Property

⁸¹ The need to combat trademark counterfeit and copyright piracy was discussed as early as in the 1970s during the Tokyo Round of trade negotiations.

only with regard to traditional commodities like wearing apparel, accessories and cigarettes, but increasingly also with regard to medicines, personal care and digital goods (music, videos, software, etc.). This can be partly explained by more frequent and efficient border controls, specialized and sensitized customs authorities as well as an overall increase of merchandise trade flows. Another reason may be the "professionalization" of counterfeiting and piracy activities through criminal networks and organised crime. However, this is only part of the explanation. After all, counterfeiting and piracy have not only grown in absolute numbers but also in terms of their share in world trade. Social acceptance of intellectual property seems to be lower than ever—not only in countries that produce and export counterfeit and pirated goods but also in countries where these goods are demanded.

3 Harmonization Beyond Trade

After 20 years, the global IP system stands at yet another crossroads, with difficult decisions to be made about how to best accommodate national interests without frustrating international expectations. The socioeconomic implications of IP protection and its functionality as an incentive, compensation and distribution mechanism vary in cost and efficiency by country, industry, and over time. What works in one situation may not work in another, and what is good for international trade is not necessarily good for national growth. Striking the balance between the welfare benefits of an IP system that is tailored to national needs and priorities and the income losses from reduced foreign trade and investment due to "insufficient" IP

⁸² Statistics prepared by U.S. Customs and Border Protection indicate that seizures have increased from 1999–2013 by 560 % (from 3.691 to 24.361) in terms of the number of seizures and by 1670 % (from 98.501.594 to 1.743.515.581 USD) in terms of the value of seized goods (calculated on the basis of the manufacturer's suggested retail price of the goods had they been genuine). For the EU, the reports on EU customs enforcement of IP rights show an increase of border detention cases between 1999 and 2013 by 1750 % (from 4.694 to 86.854).

⁸³ The annual trade reports prepared by the U.S. Census Bureau and the U.S. Bureau of Economic Analysis indicate that merchandise imports to the U.S. have increased by 206 % between 1995 and 2013 (from 749.363 to 2.294.453 million USD) and by 122 % between 1999 and 2013 (from 1.029.917 to 2.294.453 million USD). The numbers for the European Union are similar. The annual "Trade Profiles" prepared by the WTO indicate that merchandise imports to the EU have increased by 53 % between 2005 and 2013 (from 1.462.516 to 2.234.603 million USD). Trade statistics for the EU prepared by Eurostat indicate similar numbers.

⁸⁴ See OECD (2008), The Economic Impact of Counterfeiting and Piracy, pp. 87 et seq.; UNODC (2010), The Globalization of Crime: A Transnational Organized Crime Threat Assessment, pp. 173 et seq.; Europol (2011), OCTA 2011: EU Organized Crime Threat Assessment, pp. 25 et seq.; IP Crime Group (2014), IP Crime: Annual Report 2012-2013, pp. 24 et seq.

 $^{^{85}}$ OECD (2009), Magnitude of Counterfeiting and Piracy of Tangible Products: An Update, p. 1, estimating that the share of counterfeit and pirated goods in world trade has increased from 1.85 % in 2000 to 1.95 % in 2007.

protection⁸⁶ may be a hopeless endeavour. But being able to erase it from inner conviction—without facing marginalization in international trade—is a matter of national sovereignty.

The purpose of the following chapters is to develop a tentative way out of the "global IP ratchet" and the value vacuum in which international IP laws are currently created by making the international regulatory framework more inclusive and responsive to new ideas, change and diversity. In order to ensure public acceptance, harmonization measures ought to be the consequence of a deliberative "bottom-up" process with a defined goal but without a predetermined outcome. Both the validity of the harmonization claim and its effectiveness must be judged in light of this goal. The TRIPS Agreement, on the other hand, was clearly a "top-down" exercise aimed at imposing the standards of IP protection applicable in developed countries on the rest of the—less developed—world.

3.1 Learning from the European Experience

The European Union is easily criticized but nevertheless a remarkable story of success. Despite increasing heterogeneity, the EU is approaching an Internal Market that consolidates individual preferences while allowing member states to protect national interests "in ways that grow out of their own traditions" and to pursue "their own best judgments for innovative advance". The following chapters deal with the experiences of the EU on the way to the creation of an Internal Market for IP rights and the lessons that can be learnt for international harmonization.

However, some reservations need to be made: Firstly, harmonization within the European Union is rarely a walk in the park. What sounds simple in theory is often a long and stony road in practice. Secondly, there is a major difference between harmonizing the laws of states that share a common market and those of states that only form part of a free trade area and therefore ultimately remain solely responsible for their domestic markets. Thirdly, cohesion within the European Union is based on the fact that most member states would not survive alone in the global economy. And yet, despite all reservations the European Union still has a lot to

⁸⁶ See supra Sect. 2.3.

⁸⁷ P. Drahos (2001), BITs and BIPs: Bilateralism in Intellectual Property, 4 JWIP 2001, 791, 798.

⁸⁸ See M. Andenas, C.B. Andersen & R. Ashcroft (2011), Towards a Theory of Harmonization, in M. Andenas & C.B. Andersen (Eds.), Theory and Practice of Harmonization, p. 581.

⁸⁹ D.W. Leebron (1996), Claims for Harmonization: A Theoretical Framework, 27 Can. Bus. L.J. 1996, 63, 65 et seq.

⁹⁰ See supra Sect. 2.2.

⁹¹ C.F. Sabel & J. Zeitlin (2008), Learning from Difference: The New Architecture of Experimentalist Governance in the EU, 14 Eur. L.J. 2008, 271, 272.

offer when it comes to enhancing the conditions and procedures of international intellectual property harmonization.

3.1.1 Uniformity of Union Law

In the EU, implementation issues⁹² are anything but uncommon. In almost every field of law and policy, the implementation of European law creates problems. Despite harmonization, national courts tend to preserve as much of their earlier case law as possible rather than interpreting the law in the light of EU principles.⁹³ This tendency is counteracted in two ways: through substantive law and institutional arrangements.

The main source of unification is primary Union law, on which the approximation of Member States' laws is not only based (cf. Article 114 TFEU), but which also provides for an order of norms, values and principles that determine the interpretation and implementation of secondary law. The Treaties are the "basic constitutional charter" of the EU. Heristly, secondary law must be interpreted in accordance with general principles of Union law in order to protect the integrity and the coherence of the Union's legal order. Secondly, secondary law must be interpreted autonomously, i.e. "not through the lenses of national private laws". The combination of both principles ensures that national law derived from EU law is interpreted and implemented according to European patterns.

The last resort for bringing about uniformity into Member States' laws in terms of compliance with Union law is the Court of Justice of the European Union (cf. Article 19(1) TEU). Under Article 267 TFEU, the Court has jurisdiction to give preliminary rulings concerning the interpretation of the Treaties, namely primary law, and the validity and interpretation of acts of the Union, including regulations, directives, decisions, recommendations and opinions (cf. Article

⁹² See supra Sect. 2.2.1.

⁹³ See P. Rott (2005), What is the Role of the ECJ in EC Private Law?, 1 Hanse L. Rev. 2005, 6 et seq., referring to consumer sales law.

⁹⁴ ECJ, Les Verts, 294/83, EU:C:1986:166, para. 23.

⁹⁵ ECJ, Werhof, 499/04, EU:C:1986:166, para. 32; ECJ, Borgmann, C-1/02 EU:C:2004:202, para. 30; ECJ, Herbrink, C-98/91, EU:C:1994:24, para. 9.

⁹⁶ ECJ, Hagen OHG, 49/71, EU:C:1972:6, para. 6; for more recent references, see ECJ, Padawan, C-467/08, EU:C:2010:620, para. 33; ECJ, Deckmyn and Vrijheidsfonds, C-201/13, EU: C:2014:2132, paras. 14 et seq.

⁹⁷ Study Group on a European Civil Code & Research Group on EC Private Law (2008), Principles, Definitions and Model Rules of European Private Law: Draft Common Frame of Reference (DCFR), p. 134.

288 TFEU). In case of doubt, national courts will be inclined to make a reference for a preliminary ruling in order to avoid liability. ⁹⁸

The success of European legal integration testifies to the importance of the system of preliminary rulings. The "Rome Convention" of 1980 is a telling example of the contrary. Before the Court of Justice's competence to interpret the Rome Convention was established, national courts implemented its provisions in quite different manners—according to their own legal traditions—which undermined the harmonization effect envisaged for private international law. Even in the field of intellectual property law, which has been subject to far-reaching harmonization measures at the European level, national patterns of interpretation are utterly persistent. Without the Court of Justice, uniformity in the application of the law and its effects of the market would be impossible to achieve. 103

It is true that the Dispute Settlement Body (DSB) may also cater to certain consistency and uniformity regarding the interpretation of the TRIPS Agreement and thus contain the "homeward trend" of domestic applications of international law. ¹⁰⁴ However, it is neither within the legal competences of the DSB nor within its technical capacities to tell states how they ought to understand TRIPS provisions and reconcile them with other public policies. As long as national laws and practices comply with a good faith understanding of the Agreement, the DSB has no latitude to narrow down diversity.

⁹⁸ Unless there is no reasonable doubt as to the interpretation of EU law ("acte clair") or the Court has previously ruled on the matter at issue ("acte éclairé"), national courts are actually obliged to make a reference for a preliminary ruling. Under the "Francovich" doctrine, member states are liable to pay compensation to individuals who suffer a loss due to a breach of EU law (see ECJ, Francovich and Bonifaci, C-6/90 and C-9/90, EU:C:1991:428).

⁹⁹ Convention 80/934/EEC on the Law Applicable to Contractual Obligations, OJ 1980 L 266/1.
¹⁰⁰ This happened through protocols: First Protocol on the Interpretation of the Convention on the Law Applicable to Contractual Obligations, OJ 1989 L 48/1; Second Protocol Conferring on the Court of Justice Certain Powers to Interpret the Convention on the Law Applicable to Contractual Obligations, OJ 1989 L 48/17.

See P. Rott (2005), What is the Role of the ECJ in EC Private Law?, 1 Hanse L. Rev. 2005, 7.
 A. Ohly (2012), Introduction: The Quest for Common Principles of European Intellectual Property Law – Useful, Futile, Dangerous?, in A. Ohly (Ed.), Common Principles of European Intellectual Property Law, p. 4.

¹⁰³ See G.B. Dinwoodie (2000), The Integration of International and Domestic Intellectual Property Lawmaking, 23 Colum.-VLA J.L. & Arts 2000, 307, 312, referring to the European dispute between Philips and Remington regarding the availability of trade dress rights in the shape of a three-headed rotary shaver (cf. ECJ, Philips, C-299/99, EU:C:2002:377).

¹⁰⁴ The "homeward trend" describes the tendency of national courts to be influenced by national patterns and traditions. See M. Andenas, C.B. Andersen & R. Ashcroft (2011), Towards a Theory of Harmonization, in M. Andenas & C.B. Andersen (Eds.), Theory and Practice of Harmonization, p. 592.

3.1.2 Compliance with National Law and Traditions

The EU experience in the field of intellectual property shows that an approximation of Member States' laws tends to encounter resistance where this would require compromise, in particular on behalf of the countries that apply a higher level of protection.

Moral rights provide for a good example. The reluctance of Member States regarding the harmonization of moral rights seems to be owed to the fact that compromise will not be possible at the highest level of protection (currently applicable in France) nor at the lowest level (currently applicable in the United Kingdom), but rather somewhere in between. ¹⁰⁵ This would jeopardize the level of protection that some countries have "hard earned" and are unwilling to give up. In such cases, the problem will either be ignored or tackled through the backdoor. An example of the former is the Software Directive, 106 which exclusively deals with authors' economic rights. An example of the latter is the Resale Right Directive, which implicitly infuses moral rights aspects into national copyright laws by defining the resale right as an "unassignable" and "inalienable" right. 107 Where none of this is possible, harmonization will fail unless it is vital to the functioning of the Internal Market. ¹⁰⁸ The "four freedoms" underpinning the Internal Market—i.e. the free movement of goods, persons, services and capital (cf. Articles 26(2), 28, 45. 56 and 63 TFEU)—can be said to be the measure of last resort for pushing harmonization in fields that are subject to deeply entrenched disparities between the laws and traditions of the Member States.

International harmonization is different. On the one hand, it rarely requires "protectionist" countries to make substantive concessions. International law will rarely reflect a compromise at some common denominator but rather an expansion of the minimum standards of protection applicable in the more advanced countries. ¹⁰⁹ There are at least two reasons for that. For one, international harmonization

¹⁰⁵ M. Salokannel, A. Strowel & E. Derclaye (2000), Study Contract Concerning Moral Rights in the Context of the Exploitation of Works through Digital Technology, Final Report (commissioned by DG Internal Market), pp. 212 et seq., 225; I. Sirvinskaite (2011), Toward Copyright "Europeanification": European Union Moral Rights, 3 J. Int'l Media & Ent. L. 2011, 263, 271 et seq.

¹⁰⁶ Directive 2009/24/EC on the Legal Protection of Computer Programs, OJ 2009 L 111/16.

¹⁰⁷ Article 1(1) of Directive 2001/84/EC on the Resale Right for the Benefit of the Author of an Original Work of Art, OJ 2001 L 272/32.

¹⁰⁸ See European Commission (2004), Commission Staff Working Paper on the Review of the EC legal Framework in the Field of Copyright and Related Rights, SEC(2004) 995, p. 16, stating that no evidence exists in the analogue or digital environment that disparities in moral rights protection affect the good functioning of the Internal Market. This finding is partly at odds with older statements. See European Commission (1990), Follow-up to the Green Paper 1991 – Working Programme of the Commission in the Field of Copyright and Neighbouring Rights, COM(90) 584; European Commission (1996), Follow-up to the Green Paper on Copyright and Related Rights in the Information Society, COM(96) 586.

¹⁰⁹ See supra Sect. 2.2; for references, see supra fn. 36.

is usually pushed by countries which are strong in knowledge export and therefore benefit from raising the level of protection in the territories of their trading partners. For another, it is easier to enact new rights than to curtail existing ones, or to increase protection where it is weak than limiting it once it has been made available. Both reasons are interrelated. Since it is arguably easier to convince politicians of the need to strengthen protection, and since international harmonization ultimately serves trade interests, it usually leads to convergence "at the top". It speaks for itself that the TRIPS Agreement hardly involved any compromise regarding the level of IP protection on behalf of developed countries, although from an economic perspective this would have been an equally valid way to deal with the problem of jurisdictional externalities. ¹¹⁰

On the other hand, international harmonization is arguably more susceptible to insurmountable differences of opinion. Notwithstanding the general problem of much greater heterogeneity among 160 WTO contracting states than among 28 EU Member States, international law also suffers from a lack of constitutional guidance. The WTO constitutes a "common institutional framework for the conduct of trade relations" among its members, 111 but that only touches the surface of what is necessary to "re-conceptualize the TRIPS Agreement as a framework regulation for national innovation markets". 112 The EU is much more than a common market to its Member States, and the Internal Market is much more than just an area of free trade. It is built upon common principles, values and beliefs, whereas the WTO is first and foremost a partnership of convenience.

What applies to the EU as a whole is also valid for individual law and policy areas. Take the example of the European Civil Code. Before academia came up with a "Draft Common Frame of Reference", 113 major efforts were devoted to the development of general principles, such as the "Lando Principles", 114 the "Acquis

¹¹⁰ See supra note 10. The jurisdictional externalities resulting from a lack of product patent protection for pharmaceuticals in developing countries (generic companies were able to offer bioequivalent drugs, since only the process for obtaining the drug enjoyed protection, but not the drug itself) could have been eliminated in two ways: by obliging these countries to provide for product patents (as has been done through Article 27(1) TRIPS), or by inducing other countries to not grant them. In fact, pharmaceuticals we excluded from patent protection in quite a number of European countries until the late 20th century, such as Germany (until 1968), Switzerland (until 1977), Italy (until 1978), Spain and Portugal (until 1992) and Finland (until 1995).

¹¹¹ Article II(1) of the WTO Agreement.

¹¹² H. Ullrich (2015), The Political Foundations of TRIPS Revisited, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 85 (this volume).

¹¹³ Study Group on a European Civil Code & Research Group on the Existing EC Private Law (2009), Draft Common Frame of Reference (DCFR): Principles, Definitions and Model Rules of European Private Law.

¹¹⁴ O. Lando & H. Beale (2000), Principles of European Contract Law, Parts I and II (prepared by the Commission on European Contract Law); O. Lando et al. (2003), Principles of European Contract Law, Part III (prepared by the Commission on European Contract Law).

Principles"¹¹⁵ or those compiled by the "Study Group on a European Civil Code".¹¹⁶ Without this spadework, the quest for harmonization would be substantially more cumbersome than it already is. Even if full harmonization could be achieved, it is unlikely that the application of law would lead to uniform results throughout the Member States.¹¹⁷ The formulation of common principles that prompt Member States to interpret different national rules in a uniform manner is central to the acceptance and sustainability of harmonization.¹¹⁸

3.1.3 Dealing with National Interests

Where national policies and vanities are affected, harmonization is particularly problematic. The history of European integration is rich of legal diversity and differentiation as a result of diverging preferences about the creation and density of uniform rules for the Internal Market. And yet, the EU is built on compromise based on a careful mediation of national interests. 121

One only need recall the French "empty chair policy" of 1965, which was to plunge the still young Community into its first identity crisis. In the middle of 1965, under Italian presidency, the Commission submitted a proposal according to which customs revenue from the Member States' agricultural exports should no longer be paid to the Member States but rather to a Community fund in Brussels. Charles de Gaulle refused to sign this. He broke off the Council meeting, walked out of the room and left behind an "empty chair", thus incapacitating the Council. Luxembourg took over the presidency in 1966. In order to put an end to the ongoing blockade on negotiations, the "Luxembourg Compromise" was reached. It provides that where "very important interests of one or more partners are at stake, the

¹¹⁵ Research Group on the Existing EC Private Law (2007/2009), Principles of the Existing EC Contract Law (Acquis Principles).

¹¹⁶ Study Group on a European Civil Code (2006–2014), Principles of European Law.

¹¹⁷ See supra Sect. 3.1.1.

¹¹⁸ See also S.W. Waller (1994), Neo-Realism and the International Harmonization of Law: Lessons from Antitrust, 42 Kansas L. Rev. 1994, 557, 591; G.B. Dinwoodie & R.C. Dreyfuss (2012), A Neofederalist Vision of TRIPS: The Resilience of the International Intellectual Property Regime, p. 15.

¹¹⁹ See supra Sect. 2.2.3.

¹²⁰ See, for example, Protocol on Social Policy, OJ 1992 C 224/126; Protocol on the Schengen Acquis Integrated into the Framework of the European Union, OJ 1997 C 340/93; Protocol on the Position of United Kingdom and Ireland, OJ 1997 C 340/99; Protocol on the Position of Denmark, OJ 1997 C 340/10; Protocol on the Acquisition of Property in Denmark, OJ 1992 C 191/68; Protocol on Certain Provisions Relating to the United Kingdom of Great Britain and Northern Ireland, OJ 1992 C 191/87; Protocol on the Application of the Charter of Fundamental Rights of the European Union to Poland and the United Kingdom, OJ 2007 C 306/156.

¹²¹ A. Ott (2009), EU Constitutional Boundaries to Differentiation: How to Reconcile Differentiation with Integration, in A. Ott & E. Vos (Eds.), Fifty Years of European Integration: Foundations and Perspectives, p. 137.

members of the Council will endeavor, within a reasonable time, to reach solutions which can be adopted by all the members of the Council while respecting their mutual interests and those of the Community". Member States were granted a veto right in the event of a threat to national interests. If a Member State indicated that it could not consent to a proposed resolution for important reasons, negotiations would have to continue until a unanimous result was achieved.

Until today, the interests of Member States rank high in European law. The legislative process of the EU shows a strong preference for consensual decision-making, meaning that important national interests are normally accommodated. What certainly helps in that regard is the "basic constitutional charter" of the EU: the Treaties. This comprises a wide range of general principles of Union law, including fundamental rights, 124 that serve as a strong incentive for Member States to reconsider entrenched positions.

Things are considerably more complicated at the international level. For one, there is no general consensus about the TRIPS Agreement being part of a broader framework of international economic law. There is no higher ranking "constitutional order" or "acquis"¹²⁵ in light of which conflicts between TRIPS provisions and internal public policies of WTO members could be mediated.¹²⁶ The Agreement itself contains a number of policy considerations that are meant to guide the understanding of TRIPS provisions, their scope and limitations.¹²⁷ However, a closer look reveals little more than fine rhetoric. Hardly anybody will doubt that IP protection "should contribute to the promotion of technological innovation and to the transfer and dissemination of technology, to the mutual advantage of producers and users of technological knowledge and in a manner conducive to social and economic welfare, and to a balance of rights and obligations" (cf. Article 7 TRIPS). On this level of abstraction, not surprisingly, there is overwhelming consensus. But this is of little help when it comes to resolving conflicts of interest.

¹²² Unfortunately the enhanced cooperation procedure (cf. Article 20 TEU and Articles 326 to 334 TFEU) in the area of unitary patent protection has opened the doors to such behavior. See M. Lamping (2011), Enhanced Cooperation: A Proper Approach to Market Integration in the Field of Unitary Patent Protection?, 8 IIC 2011, 879.

¹²³ ECJ, Les Verts, 294/83, EU:C:1986:166, para. 23.

 $^{^{124}}$ According to Article 6(3) TEU, the fundamental rights guaranteed by the ECHR "shall constitute general principles of the Union's law".

¹²⁵ For a proposal to underpin the TRIPS Agreement with an international intellectual property "acquis", see G.B. Dinwoodie & R.C. Dreyfuss (2012), A Neofederalist Vision of TRIPS: The Resilience of the International Intellectual Property Regime, pp. 175 et seq.

¹²⁶ See K.D. Beiter (2015), Establishing Conformity between TRIPS and Human Rights: Hierarchy in International Law, Human Rights Obligations of the WTO and Extraterritorial State Obligations under the International Covenant on Economic, Social and Cultural Rights, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 445 (this volume).

¹²⁷ See the Preamble and Articles 7 and 8 of the TRIPS Agreement.

3.2 Reforming the International Regulatory Framework

The European experience shows that the success and acceptance of harmonization—and ultimately integration—mainly depends on three factors: (1) common policies and principles that inform the interpretation of the law; (2) a judicial instance that overlooks the compliance of national laws with the agreed policies and principles; and (3) a general commitment to consensual, uncoercive decision—making. These factors guide Member States in their behaviour, and constrain them in their natural tendency to see things through their own lenses and place their own interests above those of the community. This way, convergence can be achieved without jeopardizing social and economic cohesion.

Other contributions in this volume deal with the overarching goal of reconceptualizing the TRIPS Agreement as part of a broader framework of international economic and constitutional law. The following chapters attend to the abovementioned factors, whereas the issue of dispute settlement is only cursorily addressed. 129

3.2.1 The Quest for Common Principles

Harmonization can take place on different regulatory levels. ¹³⁰ First, it can apply to rules that regulate specific outcomes (e.g. quantitative emission standards). ¹³¹ Second, it can apply to policies (e.g. general commitments to reduce greenhouse gases). In contrast to rules, policies grant more discretion. States have latitude to determine how to meet the agreed policy objectives, whereas rules often need to be

¹²⁸ See H. Ullrich (2015), The Political Foundations of TRIPS Revisited, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 85 (this volume); K.D. Beiter (2015), Establishing Conformity between TRIPS and Human Rights: Hierarchy in International Law, Human Rights Obligations of the WTO and Extraterritorial State Obligations under the International Covenant on Economic, Social and Cultural Rights, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 445 (this volume); see also G.B. Dinwoodie & R.C. Dreyfuss (2012), A Neofederalist Vision of TRIPS: The Resilience of the International Intellectual Property Regime, pp. 181 et seq. ¹²⁹ For a more detailed analysis, see S. von Lewinski (2015), The WTO/TRIPS Dispute Settlement Mechanism: Experiences and Perspectives, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 603 (this volume).

¹³⁰ See R. Dworkin (1977), Taking Rights Seriously, pp. 22 et seq.

¹³¹ Examples borrowed from D.W. Leebron (1996), Claims for Harmonization: A Theoretical Framework, 27 Can. Bus. L.J. 1996, 63, 68.

literally transposed for national law to be compliant. ¹³² Third, harmonization can apply to principles (e.g. the commitment to control pollution through a market-based approach of emission trading). Their purpose would be "to influence or constrain the factors that are taken into account in making policies and rules". ¹³³ From a functional perspective, principles constitute the meta-level of rules.

Normally, the formulation of uniform rules would be preceded by an elaboration of shared policy objectives and common principles that inform the application of rules. ^{134,135} Blinded by the urge to spur international trade, the Uruguay Round ignored this. Even today, states underestimate the importance of principles for the sustainability of harmonization. In fact, they are not only important for the approximation of laws. Principles are a crucial element in the justification of IP protection as an intervention in the market that must be defined and continually reconsidered by reference to its benefits and costs. ¹³⁶ Hence, the lack of common principles in the TRIPS Agreement is ultimately part of the acceptance problem. ¹³⁷ Although Articles 7 and 8 of the Agreement claim to provide some sort of objectives and principles, these provisions are far from being sufficiently explicit, comprehensive and inherently consistent ¹³⁸ to serve as guidance for national legislators and courts with regard to policy and methodology issues.

The TRIPS Agreement would greatly benefit from a broader foundation regarding the rationale and the functionality of individual IP rights. Take patent law as an example. The patent system's primary regulatory purpose is to prevent the market from failing to produce technical knowledge at adequate levels. The overriding rationale is that, absent protection, there may be insufficient incentives to invent (i.e. invest in research and development) and innovate (i.e. invest in the commercialization of research and development results). Thus, the policy objective of the patent system is to promote economic growth through technological advancements. However, that is not how the patent system functions. Patents as such do not create

¹³² This difference has important political consequences, since different types of compromises and policy trade-offs are required at different governmental or intergovernmental levels. See D.W. Leebron (1996), Claims for Harmonization: A Theoretical Framework, 27 Can. Bus. L.J. 1996, 63, 68 et seq.

¹³³ Ibid., 68.

¹³⁴ See supra Sect. 3.1.2.

¹³⁵ Antitrust is another example. Before states can agree on a provision that defines price-fixing as illegal conduct, they must reach a more fundamental consensus: that concerted practices are bad for economic welfare and that a redistribution of rents from consumers to producers is socially undesirable. On a most basic level, they must agree that competition as such is desirable.

¹³⁶ H. Ullrich (2012), Intellectual Property: Exclusive Rights for a Purpose – The Case of Technology Protection by Patents and Copyright, in K. Klafkowska-Waśniowska (Ed.), Problemy Polskiego e Europejskiego Prawa Prywatnego: Ksiega Pamiatkowa Profesora Mariana Kępińskiego, pp. 425 et seq.; see also A. Ohly (2012), Introduction: The Quest for Common Principles of European Intellectual Property Law – Useful, Futile, Dangerous?, in A. Ohly (Ed.), Common Principles of European Intellectual Property Law, p. 6.

¹³⁷ See supra Sect. 2.2.1.

¹³⁸ See supra Sects. 2.2.3 and 3.1.3.

innovation incentives; they respond to incentives inherent in the market by allowing right holders to monetise given market opportunities. Thus, competition must not only be respected by the patent system, it is also a prerequisite of the system itself. As a result, patent protection must not interfere with dynamic competition and its twofold purpose: as a decentralised "discovery procedure" for innovation opportunities, and as a price-setting mechanism for innovation rewards. ¹⁴¹

The importance of principles for the understanding of rules can be exemplified by the non-discrimination clause in Article 27(1) of the TRIPS Agreement. Without a common understanding of patent rights as instruments of, instead of exceptions to, competition, it is hardly possible to make sense of the distinction between "discrimination" and *bona fide* "differentiation".

142,143 By the same token, a more userand competition-oriented—i.e. less patentee- or author-centered—approach to intellectual property could have also warded off the Dispute Settlement Body's (DSB) fallacy of interpreting the "three-step test" in Articles 13 and 30 of the TRIPS Agreement as cumulative.

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The purpose of formulating principles is also to build a common perception of what precisely is to be regulated, whether there is a need to regulate at all, and how far states are willing to go. Common principles cannot only inform the

¹³⁹ See also supra Sect. 2.3.

¹⁴⁰ F.A. Hayek (1968), Competition as a Discovery Procedure (lecture given at the 1968 meetings of the Philadelphia Society), reprinted in 5 Q.J. Aus. Econ. 1968, 9.

¹⁴¹ Declaration on Patent Protection: Regulatory Sovereignty under TRIPS (Version 1.0 of 15 April 2014), p. 12, para. 39.

¹⁴² See Panel Report, Canada – Patent Protection of Pharmaceutical Products, WT/DS114/R, adopted 7 April 2000, DSR 2000:V, p. 2289, paras. 7.88 et seq.

¹⁴³ Without acknowledging that the effects of patent protection differ according to the field of technology, legal differentiation will almost automatically amount to discrimination. However, if the intrinsic differences between technologies are taken into consideration, the situation is actually inverse. If discrimination is defined as "treating differently situations which are identical, or treating in the same way situations which are different" (cf. ECJ, Wagner/BALM, 8/82, EU: C:1983:41, para. 18), it would not be the unequal treatment of different technologies that amounts to discrimination, but rather their equal – i.e. undifferentiated – treatment. See Declaration on Patent Protection: Regulatory Sovereignty under TRIPS (Version 1.0 of 15 April 2014), p. 4, paras. 6 et seq.; N. Lee (2015), Revisiting the Principle of Technological Neutrality in Patent Protection in the Age of 3D Printing Technology and Cloud Computing, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 361 (this volume).

¹⁴⁴See Panel Report, Canada – Patent Protection of Pharmaceutical Products, WT/DS114/R, adopted 7 April 2000, DSR 2000:V, p. 2289, para. 7.20; Panel Report, United States – Section 110(5) of the US Copyright Act, WT/DS160/R, adopted 27 July 2000, DSR 2000:VIII, p. 3769, para. 6.74.

understanding of specific rules, but they can also serve as a maximum standard or "ceiling"¹⁴⁵ that promotes balance. ¹⁴⁶ Just as Article 2(2) of the SPS Agreement ¹⁴⁷ prevents states from maintaining sanitary measures that are not based on scientific principles and justified by scientific evidence, the TRIPS Agreement could contain an opening clause that allows states to withdraw existing, or deny further, patent protection that is not justified by meaningful economic evidence that supports the legal imperative of granting protection as a means of preventing a market failure.

Agreeing on common principles and functionalities of intellectual property is a long iterative process that requires much more commitment and self-reflection than top-down harmonization. However, it is well worth the effort, if for nothing else than fostering mutual understanding of the issues interests that lie at the heart of the field of law that is to be regulated.

3.2.2 The Role of Dispute Settlement

The role of the DSB as a guardian of the TRIPS Agreement is crucial to the overall balance of the international regulatory framework. If the Agreement is reconceived as a framework regulation for national innovation markets, the competences of the DSB must extend beyond trade-related aspects of intellectual property. Instead of being confined to trade disputes, the system could be opened to preliminary references and consultations from national courts and governments. For that matter, the DSB needs to be more than a gatekeeper to authorized self-help. This, however, would require its independence "of the states against which it will, on occasion, have to act". Is

¹⁴⁵ See A. Kur (2015), From Minimum Standards to Maximum Rules, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 133 (this volume); H. Grosse Ruse-Khan (2015), IP and Trade in a Post-TRIPS Environment, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 163 (this volume); H. Grosse Ruse-Khan (2011), Enough is Enough – The Notion of Binding Ceilings in International Intellectual Property Protection, in A. Kur & M. Levin (Eds.), Intellectual Property in a Fair World Trade System – Proposals for Reform of TRIPS, pp. 359 et seq.

¹⁴⁶ For example, understanding patents as instruments of competition whose purpose is to prevent a market failure serves as a justification for regulatory intervention in the market but concurrently also confines that intervention to what is actually necessary to prevent the market from failing.

¹⁴⁷ Agreement on the Application of Sanitary and Phytosanitary Measures, entered into force with the establishment of the WTO on 1 January 1995.

¹⁴⁸ See G.B. Dinwoodie & R.C. Dreyfuss (2012), A Neofederalist Vision of TRIPS: The Resilience of the International Intellectual Property Regime, pp. 49 et seq.; S. von Lewinski (2015), The WTO/TRIPS Dispute Settlement Mechanism: Experiences and Perspectives, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 603 (this volume).

¹⁴⁹ See E.A. Posner (2009), The Perils of Global Legalism, p. 32.

3.2.3 Dissolving the Marriage of Convenience

The TRIPS Agreement has always been different from other WTO Agreements. Despite the traditional reticence of the GATT to intervene in domestic policies, the TRIPS Agreement goes far beyond trade-related provisions. ¹⁵⁰ It directly affects how governments ought to regulate their domestic innovation markets and is therefore much more intrusive than what would have been necessary to promote the objectives of the WTO, i.e. to liberalize interstate trade by internalizing cross-border externalities. ¹⁵¹ In reality, the TRIPS Agreement is more about market regulation than trade liberalization, but it is nonetheless enchained by an overarching trade rationale.

The "marriage of convenience" ¹⁵² between trade and IP law served its purpose to address a national matter that requires global collective action. The focus on trade-related aspects of intellectual property opened the door for an international approach that otherwise would have been difficult to achieve, but the relationship has always been fragile. On the surface, it is as harmonious as it can get: Intellectual property helps to reduce impediments to trade, and trade helps to disseminate intellectual property. However, as long as the TRIPS Agreement is not allowed to step out of the shadow of the WTO and its overarching trade rationale, it will never be able to live up to its broader policy expectations. ¹⁵³ The WTO must either broaden its polity or let go of the TRIPS Agreement, even if for nothing else than allowing states to accommodate non-trade-related aspects of intellectual property without being accountable to a free trade imperative.

Besides the general problem of integrating public policy interests into a trade agreement, there are two other serious concerns.

First, the subordination of the TRIPS Agreement under the trade rationale of the WTO turns IP regulation into something relative. By creating an artificial dependency between the due level of national IP protection and the functioning of the international trading system, the perspective is shifted from what can be considered effective and adequate from the point of view of regulating innovation and creativity to what is considered effective and adequate from the perspective of trade,

¹⁵⁰ See M. Spence (2001), Which Intellectual Property Rights are Trade-Related?, in F. Francioni (Ed.), Environment, Human Rights and International Trade, pp. 263 et seq.; A. Reich (2014), The WTO as a Law-Harmonizing Institution, 25 U. Pa. J. Int'l L. 2014, 321, 338.

¹⁵¹ See H. Ullrich (2015), The Political Foundations of TRIPS Revisited, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 85 (this volume); regarding the trade rationale of the Agreement, see supra fn. 9.

¹⁵² J.H. Reichman (2000), The TRIPs Agreement Comes of Age: Conflict or Cooperation With the Developing Countries?, 32 Case W. Res. J. Int'l L. 2000, 441, 469.

¹⁵³ If the conciliation rhetoric of Article 7 of the TRIPS Agreement was to be taken seriously, one of the primary objectives of harmonizing "trade-related aspects of intellectual property" is to bring the benefits of innovation and creativity to the market by facilitating the transfer of commodified knowledge between those who produce, those who use, and those who consume. If the TRIPS' objective is defined in terms of building a bridge between producers, users and consumers, it must obviously take account of producer, user and consumer interests.

i.e. in the eyes of other countries that have decided to increase their level of IP protection and are now facing concomitant jurisdictional externalities. From that angle, any level of protection lower than what the most advanced economies consider appropriate will automatically be inadequate in terms of international trade.

Second, the combination of IP and trade law puts international IP regulation under the control of those who head the international trading system. It is difficult enough to strike the balance between exclusivity and competition within the IP system itself. This endeavour should not be unduly complicated by trade policy imperatives. There is no doubt that sanctions are needed in order to ensure that states obey to international obligations, but there is no reason to believe that fines would not be sufficient. Indeed, trade sanctions have become the method of choice in many policy areas—because they are effective. They will usually also be justified in light of the seriousness of the problem that they are meant to control. However, the mere "trade-relatedness" of intellectual property does not justify the use of trade sanctions. It is even more: States should not be allowed to use trade sanctions on other states.

3.3 Stopping the Global IP Ratchet

Even in times where domestic systems are under criticism for their inefficiency, the drive to further harmonize and elevate international minimum standards appears to be unbreakable. ¹⁵⁵ The constant to and fro between multilateralism, regionalism

¹⁵⁴ See also infra Sect. 3.3.

¹⁵⁵ K.E. Maskus & J.H. Reichman (2005), The Globalization of Private Knowledge Goods and the Privatization of Global Public Goods, in K.E. Maskus & J.H. Reichman (Eds.), International Public Goods and Transfer of Technology under a Globalized Intellectual Property Regime, pp. 23 et seq., criticizing the "export of a dysfunctional system to the rest of the world".

and bilateralism¹⁵⁶ induces a ratchet effect that leads to "expansionist intellectual property and reductionist competition rules". ¹⁵⁷ If developed states keep neglecting the dangers of constantly raising the levels of protection, a point will be reached where the system becomes untameable. ¹⁵⁸

There are different ways of decelerating or even stopping the "global IP ratchet", ¹⁵⁹ including maximum standards or ceilings, ¹⁶⁰ the inclusion of "user rights" into the TRIPS Agreement, ¹⁶¹ mandatory exceptions and limitations, ¹⁶² measures against opportunistic forum or regime shopping, ¹⁶³ a moratorium ¹⁶⁴ on

¹⁵⁶While multinational agreements serve to consolidate the level of IP protection, bilateral agreements are used to seek additional – internationally not enforceable – gains by introducing new forms of IP protection, eliminating flexibilities, or closing "loopholes". See P. Roffe (2014), Intellectual Property Chapters in Free Trade Agreements: Their Significance and Systemic Implications, in J. Drexl, H. Grosse Ruse-Khan & S. Nadde-Phlix (Eds.), EU Bilateral Trade Agreements and Intellectual Property: For Better or Worse?, pp. 28 et seq.; J. Drexl (2015), The Concept of Trade-Relatedness of Intellectual Property Rights in Times of Post-TRIPS Bilateralism, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 53 (this volume). Once the number of bilateral agreements with similar provisions has reached a critical mass, they will inevitably constitute the basis, i.e. a common ground, for discussions about further international harmonization of minimums standards. What has been agreed bilaterally or regionally (following a "Country Club" approach) is easier to assert internationally. This has played itself out repeatedly in the past - in the context of the Paris Convention, the Berne Convention and the TRIPS Agreement – and it is likely to repeat itself in the future. See B.C. Mercurio (2006), TRIPS-Plus Provisions in FTAs: Recent Trends, in L. Bartels & F. Ortino (Eds.), Regional Trade Agreements and the WTO Legal System, p. 236, speaking of a "manipulation" of multilateralism.

¹⁵⁷ H. Ullrich (2004), Expansionist Intellectual Property and Reductionist Competition Rules: A TRIPs Perspective, 7 J. Int'l Econ. L. 2004, 401.

¹⁵⁸ See R.M. Hilty (2015), Ways out of the Trap of Article 1(1) TRIPS, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 185 (this volume). Amending the TRIPS Agreement requires a two-thirds majority of all WTO members (cf. Article X of the WTO Agreement).

¹⁵⁹ P. Drahos (2001), BITs and BIPs: Bilateralism in Intellectual Property, 4 JWIP 2001, 791, 798. ¹⁶⁰ For references, see supra fn. 145.

¹⁶¹ See R.C. Dreyfuss (2004), TRIPS-Round II: Should Users Strike Back?, 71 U. Chi. L. Rev. 2002, 22; for concrete proposals, see A. Kur & M. Levin (2011), Intellectual Property in a Fair World Trade System – Proposals for Reform of TRIPS, pp. 455 et seq.

¹⁶²Like the "Marrakesh Treaty to Facilitate Access to Published Works for Persons Who Are Blind, Visually Impaired or Otherwise Print Disabled", adopted on 27 June 2013; for an analysis, see K. Köklü (2014), The Marrakesh Treaty – Time to End the Book Famine for Visually Impaired Persons Worldwide, 45 IIC 2014, 737.

¹⁶³ See D. De Bièvre & L. Thomann (2010), Forum Shopping in the Global Intellectual Property Rights Regime, MZES Working Paper No. 132; L.R. Helfer (2004), Regime Shifting: The TRIPS Agreement and the New Dynamics of International Property Lawmaking, 29 Yale J. Int'l L. 2004, 1; P. Drahos (2001), BITs and BIPs: Bilateralism in Intellectual Property, 4 JWIP 2001, 791.

¹⁶⁴ Proposed by K.E. Maskus & J.H. Reichman (2005), The Globalization of Private Knowledge Goods and the Privatization of Global Public Goods, in K.E. Maskus & J.H. Reichman (Eds.), International Public Goods and Transfer of Technology under a Globalized Intellectual Property Regime, pp. 36 et seq.

TRIPS-plus standards in bilateral and regional trade agreements (namely in TTP, TTIP and ACTA), ¹⁶⁵ and restrictions on vigilante justice in trade matters through unilateral procedures like those provided for under Section 301¹⁶⁶ of the U.S. Trade Act or EU Council Regulation No. 2641/84. ¹⁶⁷

Such procedures undermine the credibility of the DSB as a gatekeeper against violations of the TRIPS Agreement. If national laws are TRIPS compliant, then they should be considered adequate; if they are not, it is up to the DSB to determine that. By subjecting themselves to the Dispute Settlement Understanding (DSU), ¹⁶⁸ WTO members committed themselves to refrain from "unilateral measures of discrimination and retorsion". ¹⁶⁹ Whatever is not covered by the TRIPS Agreement should remain at national discretion—whether trading partners like that or not. Unilateral retaliation in trade matters disrupts the stability and equilibrium which multilateral dispute resolution is meant to foster through providing a platform where countries with different trading and bargaining powers settle their disputes at arms-length. Maintaining that equilibrium is part of the general goal to provide a "safe harbour" for states to resist bilateral pressure without fear of drawbacks regarding their international trade relations. ¹⁷⁰

¹⁶⁵ The Trans-Pacific Partnership (TPP), the Transatlantic Trade and Investment Partnership (TTIP) and the Anti-Counterfeiting Trade Agreement (ACTA). All of these agreements intend to complement the current international IP treaties while considerably raising the mandatory minimum standards.

¹⁶⁶ Under Section 301, the Office of the United States Trade Representative (USTR) undertakes a survey of its trading partners' IP laws and policies. The "Special 301 Report" identifies countries that do not provide "adequate and effective protection of intellectual property" and "deny fair and equitable market access to United States persons that rely upon intellectual property protection" (cf. 19 U.S.C. § 2242). The USTR can then impose unilateral trade sanctions, including the suspension of benefits of trade agreement concessions, the imposition of duties or other import restrictions or the suspension of the Generalized System of Preferences (GSP), which grants preferential treatment to developing countries (cf. 19 U.S.C. § 2411).

¹⁶⁷ See Council Regulation No. 2641/84 on the Strengthening of the Common Commercial Policy with regard in particular to Protection against Illicit Commercial Practices, OJ 1984 L 252/1, which provides for sanctions against illicit commercial practices of third countries, including violations of the TRIPS Agreement.

¹⁶⁸ According to Article 23 DSU, members seeking "the redress of a violation of obligations or other nullification or impairment of benefits under [WTO Agreements] or an impediment to the attainment of any objective of [WTO Agreements] [...] shall have recourse to, and abide by, the rules and procedures of this Understanding". See also Panel Report, Canada – Export Credits and Loan Guarantees for Regional Aircraft, WT/DS222/R and Corr.1, adopted 19 February 2002, DSR 2002:III, p. 849, para. 7.170.

¹⁶⁹ T. Dreier (2007), Shaping a Fair International IPR-Regime in a Globalized World, in I. Govaere & H. Ullrich (Eds.), Intellectual Property, Public Policy, and International Trade, p. 50; see, however, T.P. Stewart (1999), The GATT Uruguay Round: A Negotiating History (1986-1994), Vol. IV: The End Game (Part I), pp. 557 et seq., registering the U.S. government's intention to continue using Section 301 to pursue foreign unfair trade barriers.

¹⁷⁰ See J. Drexl (2015), The Concept of Trade-Relatedness of Intellectual Property Rights in Times of Post-TRIPS Bilateralism, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 53 (this volume).

4 The Choice of Governance Model

It is not easy to reconcile the advantages and disadvantages of harmonization and regulatory competition on a governance level. Whatever model is chosen should be conducive to the establishment of a regulatory framework that ensures "enough interjurisdictional co-operation (or harmonization) to ensure that transboundary externalities and other market failures are addressed, but with a sufficient degree of regulatory competition to prevent the resulting governmental structure from becoming an untamed, over-reaching, or inefficient Leviathan". Traditional approaches to international law-making are usually not very good at this. Once again, it may be worthwhile having a look at the European experience.

4.1 Reflexive Harmonization

Within the EU, harmonization—and market integration—is not only achieved through a top-down approach via directives and regulations, but increasingly also through "reflexive" forms of governance involving a division of labour and competences between Member States and EU institutions. One of the more prominent variants of this rather new form of governance is the "open method of coordination" (OMC), formally adopted by the European Council of Lisbon. The OMC provides a framework for voluntary intergovernmental cooperation between Member States and thus mainly relies on soft law mechanisms. It is based on jointly identifying and defining policy objectives to be achieved, establishing tools (i.e. statistics, guidelines and indicators) in order to measure best practices, and monitoring the other Member States' performance. The goal is to exchange best practices through an open and deliberative process in which all actors involved accept that no one has privileged access to the optimal regulatory solution. Member States are peer evaluated by one another, whereas the Commission's role is limited to surveillance. The Council is involved in the first stage of identifying and defining policy objectives. ¹⁷³

¹⁷¹ D.C. Etsy & D. Geradin (2001), Introduction, in D.C. Etsy & D. Geradin (Eds.), Regulatory Competition and Economic Integration: Comparative Perspectives, p. XXV.

¹⁷² See European Council (2000), Lisbon European Council 23 and 24 March 2000 – Presidency Conclusions, para. 37.

¹⁷³ So far, the OMC has influenced the regulatory process in a number of areas which fall within the competence of the Member States, such as employment and social inclusion, migration, education and training, tourism, environmental protection, energy policy, health care, pensions, human rights, and company law. See contributions in O. De Schutter & S. Deakin (2005), Social Rights and Market Forces: Is the Open Coordination of Employment and Social Policies the Future of Social Europe?; J. Zeitlin, P. Pochet & L. Magnusson (2005), The Open Method of Coordination in Action: The European Employment and Social Inclusion Strategies. The example of labour law shows how the combination of directives and reflexive governance can raise labour standards for the better. See S. Deakin (2009), Reflexive Governance and European Company Law, 15 Eur. L.J. 2009, 224.

Reflexive governance models transform diversity from an obstacle to convergence into an asset for achieving it. Instead of prematurely eliminating country-specific practices, harmonization is achieved through an iterative process of "regulatory discovery". However, this requires transparency, openness and mutual understanding for each others' best interests—qualities that international law-making traditionally lacks. States must be willing to reflect on the beliefs and presuppositions on which their laws are based, and they must be prepared to disentrench settled practices and open them for reconsideration in light other beliefs and presuppositions. ¹⁷⁶

Integrating aspects of "reflexive harmonization" into international law would allow states to experiment with legal solutions—i.e. rules—to common problems within jointly defined framework parameters—i.e. policies and principles. ¹⁷⁸ States are granted regulatory autonomy in implementing these policies and principles in good faith instead of being obliged to adopt a supposedly optimal prefabricated regulatory solution consisting of an explicit set of legal rules. In return for this autonomy, they must report on their performance and take part in a peer review process in which their implementation measures are benchmarked against agreed criteria and compared to other states' regulatory approaches. ¹⁷⁹ There is no doubt that free trade (i.e. a rule's potential of distorting trade) will remain a decisive criterion in that context. However, many other factors should also play a role, like a rule's ability to encourage technology transfer, promote economic development, and so forth. Although best practices are not likely to be the same for all countries even among those with a similar level of economic development and technological sophistication—the reflexive approach may help to show commonalities and produce a legislative "tool box", i.e. a set of best practice rules that can-but most not—be implemented in national law. For coordination and monitoring purposes, use could be made of existing institutions (WTO, WIPO, UNCTAD, OECD and others).

 $^{^{174}}$ F.A. Hayek (1968), Competition as a Discovery Procedure (lecture given at the 1968 meetings of the Philadelphia Society), reprinted in 5 Q.J. Aus. Econ. 1968, 9.

¹⁷⁵ See supra Sect. 2.1.

¹⁷⁶O. De Schutter & S. Deakin (2005), Reflexive Governance and the Dilemmas of Social Regulation, in O. De Schutter & S. Deakin (Eds.), Social Rights and Market Forces: Is the Open Coordination of Employment and Social Policies the Future of Social Europe?, p. 3.

¹⁷⁷ The term is borrowed from S. Deakin (1999), Two Types of Regulatory Competition: Competitive Federalism versus Reflexive Harmonisation, 2 Cambridge Yearbook Eur. Legal Stud. 1999, 231.

¹⁷⁸ See supra Sects. 3.2.1 and 3.2.2.

¹⁷⁹ See C.F. Sabel & J. Zeitlin (2008), Learning from Difference: The New Architecture of Experimentalist Governance in the EU, 14 Eur. L.J. 2008, 271, 273 et seq.

4.2 Accountability and Acceptance

Whether reflexive harmonization can accredit itself as more legitimate and democratic than current methods of international law-making remains disputable. The reality of reflexive governance includes opportunistic behaviour, political power games and lobbying as much as an orientation towards cooperation, accountability, acceptance and a preference for best practices. This problem is however beyond the scope of this contribution. Realistically, politics must be considered as a constitutive element of any form of governance and regulation. Its influence can at best be reduced by revealing "political blind spots" through appropriate checks and balances. This is arguably easier if the actors are members of the same political unit, such as in federal systems, or share a common political authority, such as the European Union. But even in the absence of political integration it is not impossible. Whatever institution is entrusted with the task of supervising the process of reflexive harmonization can also ensure compliance with certain democratic minimum standards.

Even without additional checks and balances, it seems safe to assume that reflexive governance models are more responsive to diverging interests than current methods of international law-making, and thus closer to customary standards of democratic legitimacy. In contrast to non-transparent, coercive, and unrepresentative trade negotiations, ¹⁸² reflexive harmonization promotes equal participation of all states in a deliberative process. It thus enhances public accountability and acceptance even without creating a direct link between international law and the national citizen.

5 Concluding Remarks

The legitimacy of a state is based on its ability to provide for a social and economic order that fosters stability and progress without actively directing social and economic processes. ¹⁸³ The legitimacy—as well as the acceptance and credibility ¹⁸⁴—of international law could be interpreted along the same lines. The aim of the TRIPS Agreement would be to provide for a framework regulation based on common

¹⁸⁰ See J.P. Voß, R. Kemp & D. Bauknecht (2006), Reflexive Governance: A View on an Emerging Path, in J.P. Voß, D. Bauknecht & R. Kemp (Eds.), Reflexive Governance for Sustainable Development, p. 425.

¹⁸¹See, for example, J.P. Voß & B. Bornemann (2011), Politics of Reflexive Governance: Challenges for Designing Adaptive Management and Transition Management, 16 Ecology & Society 2011, 2, 9.

¹⁸² See supra Sect. 2.1.

¹⁸³ See F. Böhm (1966), Privatrechtsgesellschaft und Marktwirtschaft, ORDO 1966, 75.

¹⁸⁴ See supra Sect. 2.

policies and principles within which states can accommodate international expectations towards adequate IP protection in ways that grow out of, and comply with, their own traditions and needs. This framework regulation should not only ensure the efficiency of global knowledge markets but also accommodate a range of other societal interests.

In order to make the international regulatory framework more inclusive and responsive to new ideas, change and diversity, it may be necessary to reconceive the underlying governance model. As a matter of principle, the focus must be on the process, not on the results. Although it is certainly no panacea for all governance and legitimacy problems, reflexive harmonization may facilitate advances instead of turning supposedly irreconcilable differences into daunting compromises or "constructive ambiguity".

Besides the European Union, there are of course many other examples of regional integration and harmonization, like ASEAN (Association of Southeast Asian Nations), the Mercosur (Mercado Común del Sur) or OHADA (Organisation pour l'Harmonisation en Afrique du Droit des Affaires), all of which provide for valuable experiences and alternative governance approaches. The EU focus of this contribution is not meant to place the European approach above any of these models, but only to raise awareness for the fact that there are many ways of dealing with diversity without undermining it.

References

Andenas, M., Andersen, C.B. & Ashcroft, R. (2011), Towards a Theory of Harmonization, in M. Andenas & C.B. Andersen (Eds.), Theory and Practice of Harmonization, p. 572, Cheltenham: Edward Elgar

Andersen, C.B. (2005), The Uniform International Sales Law and the Global Jurisconsultorium, 24 J.L. & Com. 2005, 159, Pittsburgh, PA: University of Pittsburgh School of Law

Arrow, K. (1962), Economic Welfare and the Allocation of Resources for Invention, in R. Nelson (Ed.), The Rate and Direction of Inventive Activity, p. 609, Princeton, NJ: Princeton University Press

Arthur, W.B. (1989), Competing Technologies, Increasing Returns, and Lock-In by Historical Events, 99 Econ. J. 1989, 116, Hoboken, NJ: Wiley

Bebchuk, L.A. & Roe, M.J. (2000), A Theory of Path Dependence in Corporate Governance and Ownership, 52 Stanford L. Rev. 2000, 127, Stanford: Stanford Law School

Beiter, K.D. (2015), Establishing Conformity between TRIPS and Human Rights: Hierarchy in International Law, Human Rights Obligations of the WTO and Extraterritorial State Obligations under the International Covenant on Economic, Social and Cultural Rights, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles (p. 445), Heidelberg: Springer (this volume)

Böhm, F. (1966), Privatrechtsgesellschaft und Marktwirtschaft, ORDO – Jahrbuch für die Ordnung von Wirtschaft und Gesellschaft 1966, 75, Stuttgart: Lucius

¹⁸⁵ See supra Sect. 3.

¹⁸⁶ See supra Sect. 4.

- De Bièvre, D. & Thomann, L. (2010), Forum Shopping in the Global Intellectual Property Rights Regime, MZES Working Paper No. 132, Mannheim: Mannheimer Zentrum für Europäische Sozialforschung
- Braga, C.A.P. (1996), Trade Related Intellectual Property Issues: The Uruguay Round and its Economic Implications, in W. Martin & L.A. Winters (Eds.), The Uruguay Round and Developing Countries, p. 341, Cambridge: Press Syndicate of the University of Cambridge
- Branstetter, L., Foley, C.F. & Saggi, K. (2010), Has the Shift to Stronger Intellectual Property Rights Promoted Technology Transfer, FDI, and Industrial Development?, 2 WIPO J. 2010, 93, Geneva: WIPO
- Branstetter, L.G. et al. (2007), Intellectual Property Rights, Imitation, and Foreign Direct Investment: Theory and Evidence, NBER Working Paper 13033, Cambridge, MA: National Bureau of Economic Research
- Chang, H.-J. (2001), Intellectual Property Rights and Economic Development: Historical Lessons and Emerging Issues, 2 J. Hum. Dev. 2001, 288, London: Routledge
- Chang, H.-J. (2002), Kicking Away the Ladder: Development Strategy in Historical Perspective, London: Anthem Press
- Clark, J. M. (1961), Competition as a Dynamic Process, Washington: The Brookings Institution Clark, J.M. (1940), Toward a Concept of Workable Competition, 30 Amer. Econ. Rev. 1940, 241, Nashville, TN: American Economic Association
- Cornish, W. & Liddell, K. (2015), The Origins and Structure of the TRIPS Agreement, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles (p. 3), Heidelberg: Springer (this volume)
- Correa, C. (2007), Trade Related Aspects of Intellectual Property Rights: A Commentary on the TRIPS Agreement, Oxford: Oxford University Press
- Correa, C.M. (2005), Can the TRIPS Agreement Foster Technology Transfer to Developing Countries?, in K.E. Maskus & J.H. Reichman (Eds.), International Public Goods and Transfer of Technology under a Globalized Intellectual Property Regime, p. 227, Cambridge: Cambridge University Press
- Deakin, S. (1999), Two Types of Regulatory Competition: Competitive Federalism versus Reflexive Harmonisation A Law and Economics Perspective on Centros, 2 Cambridge Yearbook Eur. Legal Stud. 1999, 231, Cambridge: Centre for European Legal Studies, University of Cambridge
- Deakin, S. (2009), Reflexive Governance and European Company Law, 15 Eur. L.J. 2009, 224, Oxford/Malden: Blackwell Publishing
- Declaration on Patent Protection: Regulatory Sovereignty under TRIPS (Version 1.0 of 15 April 2014), published in 45 IIC 2014, 679, Munich/Berlin: C.H. Beck/Springer
- Dinwoodie, G.B. & Dreyfuss, R.C. (2012), A Neofederalist Vision of TRIPS: The Resilience of the International Intellectual Property Regime, Oxford: Oxford University Press
- Dinwoodie, G.B. (2000), The Integration of International and Domestic Intellectual Property Lawmaking, 23 Colum.-VLA J.L. & Arts 2000, 307, New York, NY: Columbia University School of Law
- Dinwoodie, G.B. (2006), Some Remarks on the Limits of Harmonization, 5 J. Marshall Rev. Intell. Prop. L. 2006, 596, Chicago, IL: John Marshall School of Law
- Drahos, P. & Braithwaite, J. (2002), Information Feudalism: Who Owns the Knowledge Economy?, Oxford: Earthscan
- Drahos, P. (1995), Global Property Rights in Information: The Story of TRIPS at the GATT, 13 Prometheus 1995, 6. London: Routledge
- Drahos, P. (1996), A Philosophy of Intellectual Property, Aldershot: Dartmouth Publishing Co. Ltd
- Drahos, P. (2001), BITs and BIPs: Bilateralism in Intellectual Property, 4 JWIP 2001, 791, Malden: John Wiley & Sons.
- Drahos, P. (2002), Developing Countries and International Intellectual Property Standard-Setting, 7 JWIP 2002, 765, Malden: John Wiley & Sons

- Dreier, T. (2007), Shaping a Fair International IPR-Regime in a Globalized World, in I. Govaere & H. Ullrich (Eds.), Intellectual Property, Public Policy, and International Trade, p. 43, Brussels: Peter Lang
- Drexl, J. (2015), The Concept of Trade-Relatedness of Intellectual Property Rights in Times of Post-TRIPS Bilateralism, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles (p. 53), Heidelberg: Springer (this volume)
- Drexl, J., Grosse Ruse-Khan, H. & Nadde-Phlix, S. (2014), EU Bilateral Trade Agreements and Intellectual Property: For Better or Worse?, Berlin/Heidelberg: Springer
- Dreyfuss, R.C. (2004), TRIPS-Round II: Should Users Strike Back?, 71 U. Chi. L. Rev. 2002, 22, Chicago, IL: University of Chicago Law School
- Duffy, J.F. (2002), Harmony and Diversity in Global Patent Law, 17 Berkeley Tech. L.J. 2002, 685, Berkeley: UC Berkeley School of Law
- Dutfield, G. & Suthersanen, U. (2005), Harmonisation or Differentiation in Intellectual Property Protection? The Lessons of History, 23 Prometheus 2005, 131, London: Routledge
- Dworkin, R. (1977), Taking Rights Seriously, Cambridge/London: Harvard University Press
- Ericsson, S. (2015), The Commodification of Internet Intermediary Safe Harbors: Avoiding Premature Harmonization around a Suboptimal Standard, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles (p. 245), Heidelberg: Springer (this volume)
- Etsy, D.C. & Geradin, D. (2001), Introduction, in D.C. Etsy & D. Geradin (Eds.), Regulatory Competition and Economic Integration: Comparative Perspectives, p. XVII, Oxford: Oxford University Press
- European Commission (1990), Follow-up to the Green Paper 1991 Working Programme of the Commission in the Field of Copyright and Neighbouring Rights, COM(90) 584
- European Commission (1996), Follow-up to the Green Paper on Copyright and Related Rights in the Information Society, COM(96) 586
- European Commission (2004), Commission Staff Working Paper on the Review of the EC legal Framework in the Field of Copyright and Related Rights, SEC(2004) 995
- European Commission (2011), A Single Market for Intellectual Property Rights: Boosting Creativity and Innovation to Provide Economic Growth, High Quality Jobs and First Class Products and Services in Europe, COM(2011) 287
- European Council (2000), Lisbon European Council 23 and 24 March 2000 Presidency Conclusions
- Europol (2011), OCTA 2011: EU Organized Crime Threat Assessment, The Hague: European Police Office
- Fink, C. & Braga, C.A.P. (1999), How Stronger Protection of Intellectual Property Rights Affects International Trade Flows, World Bank Policy Research Working Paper 205, Washington, DC: The International Bank for Reconstruction and Development/The World Bank
- Fox, E. (2003), International Antitrust and the Doha Dome, 43 Va. J. Int'l L. 2003, 911, Charlottesville: The Virginia Journal of International Law Association
- Frischtak, C.R. (1993), Harmonization Versus Differentiation in Intellectual Property Right Regimes, in M.B. Wallerstein, M.E. Mogee & R.A. Schoen (Eds.), Global Dimensions of Intellectual Property Rights in Science and Technology, p. 89, Washington, D.C.: National Academies Press
- Gervais, D. (2014), Current Issues in International Intellectual Property Norm-Making, in J. Drexl, H. Grosse Ruse-Khan & S. Nadde-Phlix (Eds.), EU Bilateral Trade Agreements and Intellectual Property: For Better or Worse?, p. 3, Berlin/Heidelberg: Springer
- Glass, A.J. & Saggi, K. (2002), Intellectual Property Rights and Foreign Direct Investment, 56 J. Int'l Econ. 2002, 387, Oxford: Oxford University Press
- Goode, R. (1993), Reflections on the Harmonization of Commercial Law, in R. Cranston & R. Goode (Eds.), Commercial and Consumer Law: National and International Dimensions, p. 1, Oxford: Clarendon Press

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Gorlin, J.J. (1999), An Analysis of the Pharmaceutical-Related Provision of the WTO TRIPS (Intellectual Property Agreement), London: Intellectual Property Institute

- Grosse Ruse-Khan, H. (2015), IP and Trade in a Post-TRIPS Environment, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles (p. 163), Heidelberg: Springer (this volume)
- Grosse Ruse-Khan, H. et al. (2013), Principles for Intellectual Property Provisions in Bilateral and Regional Agreements, 44 IIC 2013, 878, Munich/Berlin: C.H. Beck/Springer
- Hayek, F.A. (1968), Competition as a Discovery Procedure (lecture given at the 1968 meetings of the Philadelphia Society), reprinted in 5 Q.J. Aus. Econ. 1968, 9, Oxford: Oxford University Press
- Helfer, L.R. (2004), Regime Shifting: The TRIPS Agreement and the New Dynamics of International Property Lawmaking, 29 Yale J. Int'l L. 2004, 1, New Haven: Yale Law School
- Henning-Bodewig, F. (2015), TRIPS and Corporate Social Responsibility: Unethical Equals Unfair Business Practices? in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles (p. 701), Heidelberg, Springer (this volume)
- Heuss, E. (1965), Allgemeine Markttheorie, Tübingen: Mohr Siebeck
- Hilty, R.M. (2015), Ways out of the Trap of Article 1(1) TRIPS, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles (p. 185), Heidelberg: Springer (this volume)
- Horlick, G.N. (1994), Sovereignty and International Trade Regulation, 20 Can.-U.S. L.J. 1994, 57, Cleveland: Case Western Reserve University School of Law
- IP Crime Group (2014), IP Crime: Annual Report 2012-2013, Newport, UK: Intellectual Property Office
- Jeremy, D.J. (1981), Transatlantic Industrial Revolution: The Diffusion of Textile Technologies between Britain and America, Cambridge, MA: The MIT Press
- Johnson, C. (1995), Japan: Who Governs? The Rise of the Developmental State, New York, NY: W.W. Norton & Company
- Kahn-Freund, O. (1974), On Uses and Misuses of Comparative Law, 37 Mod. L. Rev. 1974, 1, Malden: John Wiley & Sons.
- Khan, B.Z. (2002), Intellectual Property and Economic Development: Lessons from American and European History, IPR Commission Study Paper 1a
- Kim, L. (2002), Technology Transfer and Intellectual Property Rights: Lessons from Korea's Experience, UNCTAD/ICTSD Working Paper 2002
- Kingston, W. (2010), Beyond Intellectual Property: Matching Information Protection to Innovation, Cheltenham: Edward Elgar
- Köklü, K. (2014), The Marrakesh Treaty Time to End the Book Famine for Visually Impaired Persons Worldwide, 45 IIC 2014, 737, Munich/Berlin: C.H. Beck/Springer
- Kumar, N. (2002), Intellectual Property Rights, Technology and Economic Development: Experiences of Asian Countries, IPR Commission Study Paper 1b
- Kur, A. & Grosse Ruse-Khan, H. (2011), Enough is Enough The Notion of Binding Ceilings in International Intellectual Property Protection, in A. Kur & M. Levin (Eds.), Intellectual Property in a Fair World Trade System – Proposals for Reform of TRIPS, p. 359, Cheltenham: Edward Elgar
- Kur, A. & Levin, M. (2011), Intellectual Property in a Fair World Trade System Proposals for Reform of TRIPS, Cheltenham: Edward Elgar
- Kur, A. (2015), From Minimum Standards to Maximum Rules, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles (p. 133), Heidelberg, Springer (this volume)
- Lamping, M. (2010), Innovationsförderung nach TRIPS: Zwischen progressiver Liberalisierung und regulativem Fundamentalismus, in R. Hilty, T. Jaeger & M. Lamping (Eds.), Herausforderung Innovation, p. 119, Berlin/Heidelberg: Springer
- Lamping, M. (2010), Patentschutz und Marktmacht, Cologne: Carl Heymanns

- Lamping, M. (2011), Enhanced Cooperation: A Proper Approach to Market Integration in the Field of Unitary Patent Protection?, 8 IIC 2011, 879, Munich/Berlin: C.H. Beck/Springer
- Lando, O. & Beale, H. (2000), Principles of European Contract Law, Parts I and II (prepared by the Commission on European Contract Law), The Hague/London/Boston: Kluwer Law International
- Lando O. et al. (2003), Principles of European Contract Law, Part III (prepared by the Commission on European Contract Law), The Hague/London/Boston: Kluwer Law International
- Lee, N. (2015), Revisiting the Principle of Technological Neutrality in Patent Protection in the Age of 3D Printing Technology and Cloud Computing, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles (p. 361), Heidelberg: Springer (this volume)
- Leebron, D.W. (1996), Claims for Harmonization: A Theoretical Framework, 27 Can. Bus. L.J. 1996, 63, Toronto, ON: University of Toronto Faculty of Law
- Legrand, P. (1996), European Legal Systems Are Not Converging, 45 Int'l & Comp. L.Q. 1996, 52, London: British Institute of International and Comparative Law
- von Lewinski, S. (2015), The WTO/TRIPS Dispute Settlement Mechanism: Experiences and Perspectives, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles (p. 603), Heidelberg: Springer (this volume)
- Loewenheim, U. (1996), Harmonization and Intellectual Property in Europe, 2 Colum. J. Eur. L. 1996, 481, New York, NY: Columbia Law School
- Machlup, F. (1983), Knowledge, Vol. III: The Economics of Information and Human Capital, Princeton, NJ: Princeton University Press
- Manne, G.A. & Weinberger, S. (2012), International Signals: The Political Dimension of International Competition Law, 57 Antitrust Bull. 2012, 485, Thousand Oaks, CA: SAGE Publications
- Mansfield, E. (1993), Unauthorized Use of Intellectual Property: Effects on Investment, Technology Transfer, and Innovation, in M.B. Wallerstein, M.E. Mogee & R.A. Schoen (Eds.), Global Dimensions of Intellectual Property Rights in Science and Technology, p. 107, Washington D.C.: National Academies Press
- Maskus, K. (1998), The Role of Intellectual Property Rights in Encouraging Foreign Direct Investment and Technology Transfer, 9 Duke J. Comp. & Int'l L. 1998, 109, Durham: Duke University School of Law
- Maskus, K.E. & Penubarti, M. (1995), How Trade-Related are Intellectual Property Rights?, 39 J. Int'l Econ. 1995, 227, Amsterdam: Elsevier
- Maskus, K.E. & Penubarti, M. (1997), Patents and International Trade: An Empirical Study, in K.E. Maskus et al. (Eds.), Quiet Pioneering: Robert M. Stern and His International Economic Legacy, p. 95, Ann Arbor, MI: University of Michigan Press
- Maskus, K.E. & Reichman, J.H. (2005), The Globalization of Private Knowledge Goods and the Privatization of Global Public Goods, in K.E. Maskus & J.H. Reichman (Eds.), International Public Goods and Transfer of Technology under a Globalized Intellectual Property Regime, p. 3, Cambridge: Cambridge University Press
- Maskus, K.E. (1998), The International Regulation of Intellectual Property, 134 Weltwirtschaftliches Archiv 186, Tübingen: Mohr Siebeck
- Maskus, K.E. (2012), Private Rights and Public Problems: The Global Economics of Intellectual Property in the 21st Century, Washington D.C.: Peterson Institute for International Economics Matthews, D. (2002), Globalising Intellectual Property Rights, London: Routledge
- May, C. (2003), Why IPRs are a Global Issue, 25 EIPR 2003, 3, London: Sweet & Maxwell
- McCalman, P. (2001), Reaping What You Sow: An Empirical Analysis of International Patent Harmonization, 55 J. Int'l Econ. 2001, 161, Amsterdam: Elsevier
- Mercurio, B.C. (2006), TRIPS-Plus Provisions in FTAs: Recent Trends, in L. Bartels & F. Ortino (Eds.), Regional Trade Agreements and the WTO Legal System, p. 215, Oxford: Oxford University Press
- Merges, R.P. (1990), Battle of Lateralisms: Intellectual Property and Trade, 8 B.U. Int'l L.J. 1990, 245, Boston: Boston University School of Law

Merryman, J. (1987), Letter to the Editor: Civil Law Tradition, 35 A. J. Comp. L. 1987, 438, Baltimore, MD: ASCL

- Montesquieu (1777), Complete Works, Vol. 1: The Spirit of Laws, London: T. Evans
- Mossinghoff, G.J. (2000), National Obligations under Intellectual Property Treaties: The Beginning of a True International Regime, 9 Fed. Circuit B.J. 2000, 591, Washington, D.C.: GWU Law School
- Nelson, R.R. & Wright, G. (1992), The Rise and Fall of American Technological Leadership, 30 JEL 1992, 1931, Nashville: American Economic Association
- Newfarmer, R. et al. (2002), Global Economic Prospects and the Developing Countries: Making Trade Work for the World's Poor (World Bank Report), Washington, DC: World Bank Group OECD (2008), The Economic Impact of Counterfeiting and Piracy, OECD Publishing
- OECD (2009), Magnitude of Counterfeiting and Piracy of Tangible Products: An Update
- Ohly, A. (2012), Introduction: The Quest for Common Principles of European Intellectual Property Law Useful, Futile, Dangerous?, in A. Ohly (Ed.), Common Principles of European Intellectual Property Law, p. 3, Tübingen: Mohr Siebeck
- Ordover, J.A. (1991), A Patent System for Both Diffusion and Exclusion, 5 J. Econ. Persp. 1991, 43, Nashville: American Economic Association
- Ott, A. (2009), EU Constitutional Boundaries to Differentiation: How to Reconcile Differentiation with Integration, in A. Ott & E. Vos (Eds.), Fifty Years of European Integration: Foundations and Perspectives, p. 113, The Hague: Asser Press
- Podszun, R. & Franz, B. (2015), Regulatory Innovation and the Institutional Design of the TRIPS Agreement, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles (p. 279), Heidelberg: Springer (this volume)
- Popper, K.R. (1945), The Open Society and its Enemies, Vol. I: The Spell of Plato, 1st ed., London: Routledge
- Posner, E.A. (2009), The Perils of Global Legalism, Chicago: University of Chicago Press
- Reich, A. (2014), The WTO as a Law-Harmonizing Institution, 25 U. Pa. J. Int'l L. 2014, 321, Philadelphia: University of Pennsylvania Law School
- Reichman, J.H. & Dreyfuss, R.C. (2007), Harmonization without Consensus: Critical Reflections on Drafting a Substantive Patent Law Treaty, 57 Duke L.J. 2007, 85, Durham: Duke University School of Law
- Reichman, J.H. (1996), From Free Riders to Fair Followers: Global Competition Under the TRIPS Agreement, 29 NYU J. Int'l L. & Pol. 1996, 11, New York: New York University School of Law
- Reichman, J.H. (2000), The TRIPs Agreement Comes of Age: Conflict or Cooperation With the Developing Countries?, 32 Case W. Res. J. Int'l L. 2000, 441, Cleveland: Case Western Reserve University School of Law
- Reichman, J.H. (2009), Compulsory Licensing of Patented Pharmaceutical Inventions: Evaluating the Options, 37 JLME 2009, 247, Boston: The American Society of Law, Medicine & Ethics
- Research Group on the Existing EC Private Law (2007/2009), Principles of the Existing EC Contract Law (Acquis Principles), München: Sellier
- Ricardo, D. (1821), On the Principles of Political Economy and Taxation, London: John Murray Roffe, P. (2014), Intellectual Property Chapters in Free Trade Agreements: Their Significance and Systemic Implications, in J. Drexl et al. (Eds.), EU Bilateral Trade Agreements and Intellectual Property: For Better or Worse?, p. 17, Berlin/Heidelberg: Springer
- Rott, P. (2005), What is the Role of the ECJ in EC Private Law?, 1 Hanse L. Rev. 2005, 6, Bremen: Hanse Law School
- Sabel, C.F. & Zeitlin, J. (2008), Learning from Difference: The New Architecture of Experimentalist Governance in the EU, 14 ELJ 2008, 271, Oxford: Blackwell Publishers
- Saggi, K. & Trachtman, J.P. (2011), Incomplete Harmonization Contracts in International Economic Law: Report of the Panel, China Measures Affecting the Protection and Enforcement of Intellectual Property Rights, WT/DS362/R, adopted 20 March 2009, 10 World Trade Rev. 2011, 63, Cambridge: Cambridge University Press

- Salokannel, M. et al. (2000), Study Contract Concerning Moral Rights in the Context of the Exploitation of Works through Digital Technology, Final Report (commissioned by DG Internal Market), Study Contract n° ETD/99/B5-3000/E°28
- Samuelson, P.A. (1954), The Pure Theory of Public Expenditure, 36 Rev. Econ & Stat 1954, 387, Cambridge (MA): Harvard Kennedy School
- Schumpeter, J.A. (1942), Capitalism, Socialism and Democracy, Wiesbaden: VS Verlag für Sozialwissenschaften
- De Schutter O. & Deakin S. (2005), Reflexive Governance and the Dilemmas of Social Regulation, in O. De Schutter & S. Deakin (Eds.), Social Rights and Market Forces: Is the Open Coordination of Employment and Social Policies the Future of Social Europe?, p. 1, Brussels: Bruylant
- De Schutter, O. & Deakin, S. (2005), Social Rights and Market Forces: Is the Open Coordination of Employment and Social Policies the Future of Social Europe?, Brussels: Bruylant
- Sell, S.K. (1998), Power and Ideas: North-South Politics of Intellectual Property and Antitrust, New York: State University of New York Press
- Sell, S.K. (2003), Private Power, Public Law: The Globalization of Intellectual Property Rights, Cambridge: Cambridge University Press
- Shapiro, S.A. (2002), International Trade Agreements, Regulatory Protection, and Public Accountability, 54 Admin. L. Rev. 2002, 436, Washington, D.C.: American University Washington College of Law
- Sherwood, R. (1993), Why a Uniform Intellectual Property System Makes Sense for the World, in M.B. Wallerstein et al. (Eds.), Global Dimensions of Intellectual Property Rights in Science and Technology, p. 68, Washington, D.C.: National Academy Press
- Simon, C. (1998), The Rise of the Swiss Chemical Industry Reconsidered, in E. Homburg, A.S. Travis & H.G. Schröter (Eds.), The Chemical Industry in Europe, 1850-1914: Industrial Growth, Pollution, and Professionalization, p. 9, Dordrecht: Springer.
- Sirvinskaite, I. (2011), Toward Copyright "Europeanification": European Union Moral Rights, 3 J. Int'l Media & Ent. L. 2011, 263, Los Angeles: Southwestern Law School
- Smith, P.J. (2001), How Do Foreign Patent Rights Affect U.S. Exports, Affiliate Sales and Licenses?, 55 J. Int'l Econ. L. 2001, 411, Oxford: Oxford University Press
- Spence, M. (2001), Which Intellectual Property Rights are Trade-Related?, in F. Francioni (Ed.), Environment, Human Rights and International Trade, p. 263, Oxford: Hart
- Stephan, P.B. (1999), The Futility of Unification and Harmonization in International Commercial Law, 39 Va. J. Int'l L. 1999, 743, Charlottesville: The Virginia Journal of International Law Association
- Stewart, T.P. (1993), The GATT Uruguay Round: A Negotiating History (1986-1992), Vol. II: Commentary, London: Kluwer Law International
- Stewart, T.P. (1999), The GATT Uruguay Round: A Negotiating History (1986-1994), Vol. IV: The End Game (Part I), London: Kluwer Law International
- Study Group on a European Civil Code & Research Group on EC Private Law (2008), Principles, Definitions and Model Rules of European Private Law: Draft Common Frame of Reference (DCFR), München: Sellier
- Study Group on a European Civil Code (2006-2014), Principles of European Law, Brussels: Bruylant
- Sturley, M.F. (1989), International Uniform Law in National Courts: The Influence of Domestic Law in Conflicts of Interpretation, 27 Va. J. Int'l L. 1989, 729, Oxford: Oxford University Press
- Tanner, J. (1998), The Swiss Pharmaceutical Industry: The Impact of Industrial Property Rights and Trust in the Laboratory, 1907-1939, in Travis A.S. et al. (Eds.), Determinants in the Evolution of the European Chemical Industry, 1900-1939, p. 257-271, Dordrecht: Springer
- Taylor, C. & Silberston, Z. (1973), The Economic Impact of the Patent System, Cambridge: Cambridge University Press

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Teubner, G. (1998), Legal Irritants: Good Faith in British Law or How Unifying Law Ends Up in New Differences, 61 Mod. L. Rev. 1998, 11, London: London School of Economics

- Trebilcock, M.J. & Howse, R. (2002), Regulation of International Trade, London: Routledge
- U.S. House of Representatives (1984), Unfair Foreign Trade Practices Stealing American Intellectual Property: Imitation is not Flattery (report prepared by the Subcommittee on Oversight and Investigations of the Committee on Energy and Commerce)
- Ullrich, H. (1996), Technology Protection According to TRIPS: Principles and Problems, in F.-K. Beier & G. Schricker (Eds.), From GATT to TRIPS: The Agreement on Trade-Related Aspects of Intellectual Property Rights, p. 357, Weinheim: Wiley-VCH
- Ullrich, H. (2004), Expansionist Intellectual Property and Reductionist Competition Rules: A TRIPs Perspective, 7 J. Int'l Econ. L. 2004, 401, Oxford: Oxford University Press
- Ullrich, H. (2012), Intellectual Property: Exclusive Rights for a Purpose The Case of Technology Protection by Patents and Copyright, in K. Klafkowska-Waśniowska (Ed.), Problemy Polskiego e Europejskiego Prawa Prywatnego: Ksiega Pamiatkowa Profesora Mariana Kępińskiego, p. 425, Warszawa: Lex
- Ullrich, H. (2015), The Political Foundations of TRIPS Revisited, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles (p. 85), Heidelberg: Springer (this volume)
- UNODC (2010), The Globalization of Crime: A Transnational Organized Crime Threat Assessment, New York: United Nations Publications
- Voß, J.P. & Bornemann, B. (2011), Politics of Reflexive Governance: Challenges for Designing Adaptive Management and Transition Management, 16 Ecology & Society 2011, 2, Wolfville: Acadia University
- Voß, J.P., Kemp, R. & Bauknecht, D. (2006), Reflexive Governance: A View on an Emerging Path, in J.P. Voß et al. (Eds.), Reflexive Governance for Sustainable Development, p. 419, Cheltenham: Edward Elgar
- Waller, S.W. (1994), Neo-Realism and the International Harmonization of Law: Lessons from Antitrust, 42 Kansas L. Rev 1994, 557, Lawrence: University of Kansas School of Law
- Yu, P.K. (2006), Five Disharmonizing Trends in the International Intellectual Property Regime, in P.K. Yu (Ed.), Information Wealth: Issues and Practices in the Digital Age, Vol. 4: International Intellectual Property Law and Policy, p. 73, Westport: Praeger
- Zeitlin, J., et al. (2005), The Open Method of Coordination in Action: The European Employment and Social Inclusion Strategies, Pieterlen: Peter Lang
- Zumbansen, P.C. (2006), Spaces and Places: A Systems Theory Approach to Regulatory Competition in European Company Law, 12 ELJ 2006, 534, Oxford: Blackwell Publishers

Part IV TRIPS and Countervailing Principles

Revisiting the Principle of Technological Neutrality in Patent Protection in the Age of 3D Printing Technology and Cloud **Computing**

Nari Lee

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Abstract Contemporary patent laws based on the norms of the WTO-TRIPS Agreement seem to be driven toward technological neutrality and universal applicability. In most countries, a technologically neutral standard of patentability applies in a non-discriminating manner, regardless of the field of technology, and regardless of the identity of the inventor and the place of the invention. Neutrality in the substantive aspects of patent laws, among others, now extends to the subject matter neutrality—that the availability of patent protection is not tied to the technological field and neutrality in the enjoyment of the right. In contrast to this neutral outlook of contemporary patent law, subjective policy aspects of patent law have long been part of patent law making. For society, the need for an economic and innovation policy not to subject to a certain field of industry to patenting still exists. As a matter of practice, the need to differentiate various technological fields so as to determine exact parameters for substantive patent examination continues to exist. New emerging technologies such as cloud computing and 3D printing are good examples.

Prof. Dr. Nari Lee is Professor of Law at Hanken School of Economics.

N. Lee (\boxtimes)

Department of Accounting and Commercial Law, Hanken School of Economics, Helsinki,

e-mail: nari.lee@hanken.fi

This paper reviews the notion of technological neutrality in patent protection and its meaning in the age of 3D printing and cloud computing. Both of these technologies are further instances of computer programming technology in which the industry is currently defining its own field of activity, and where the copying of the expression may lead to the exploitation of ideas, literally. Using these two new technologies as examples of subject matters where not only the standard of patent eligibility but also exploitation is questioned, this paper will examine the exact parameters of technological specificity set down in the TRIPS principle of neutrality of patent protection and explore to what extent and manner the future international patent norm should consider the principle of neutrality.

1 Introduction

Laws on technology are often said to lag behind, because technology as an expression of human ingenuity often outwits the imagination of the law. New rules and regulation, if necessary, are often proposed after the impacts of new technologies are already felt and uncertainties regarding legal relations surrounding technological prospects are highlighted through litigation. This "recurring dilemma" of delayed reaction of the law manifests even more significantly in the context of international norm setting, where the legislative process is notably slower. International conventions which aim to regulate areas of technology may suffer from even further delays, as the initiatives to harmonize or react globally to a particular technological phenomenon not only need to follow accepted procedural rules of treaty making, based on international consensus building, but may also be subject to international politics. The delay in the process was such that some commentators considered the WTO-TRIPS Agreement as a already out-dated, and framed in the technological context of pre-internet, pre-digital technology when it was finally agreed.

¹ L. Bennett Moses (2007), Recurring Dilemmas: The Law's Race to keep up with Technological Change, 2 J.L. Tech. & Pol'y 2007, 240.

² See for example P. Drahos & J. Braithwaite (2002), Information Feudalism: Who owns the Knowledge Economy?. See also C. May (2013), The Global Political Economy of Intellectual Property Rights: The New Enclosures?.

³ Agreement on Trade–Related Aspects of Intellectual Property Rights Vol. 31 of 15 April 1994, 33 I.L.M. 81 [hereinafter TRIPS Agreement].

⁴ See for example, M.A. Hamilton (1996), The TRIPS Agreement: Imperialistic, Outdated, and Overprotective, 29 Vand. J. Transnat'l L. 1996, 613–1151; compare, D. Harris (2010), TRIPS after Fifteen Years: Success or Failure, as measured by Compulsory Licensing, 18 J. Intell. Prop. L. 2010, 367–400; J.H. Reichman (1996), Compliance with the TRIPS Agreement: Introduction to a Scholarly Debate, 29 Vand. J. Transnat'l L. 1996, 363–390; P.K. Yu (2003), The Harmonization Game: What Basketball can Teach about Intellectual Property and International Trade, 26 Fordham Int'l L.J. 2003, 218–256.

After two decades of the TRIPS Agreement, the dilemma of the law playing catch up with the pace of technological development is still strongly present in law and policy making on innovation and intellectual property. The drafters of the TRIPS Agreement could not take into account the technological possibility of digital reproduction and ubiquity of instant global communication through arrangement of vast networked computers. The gap between the technological reality and the text of the TRIPS Agreement is now even bigger. Consumers and end-users are now living with technological realities of cloud computing services and 3D scanning and printing that are built upon Internet platforms and digital information processing. These technologies are increasingly becoming accessible to the average consumer through hand-held programmable devices (e.g. smart mobile phones or tablets) connected to a network. Through "the cloud" that both distributes computing capacities and stores large amounts of data, we can access, process and share digital data regardless of geographical location.⁵ Consumers and end-users no longer need to carry bulky physical devices. Through the cloud, consumers may 3D-scan physical objects and reproduce them virtually. The reproduced data stored in the cloud may be modified either to improve or to customize the information and then be used to produce a physical embodiment. If there is no 3D printer or printing service nearby, one may have it delivered from abroad, possibly using mobile phones. As the materials that can be used in such printers become more diversified, the application of technology and business potential seems to expand with sciencefiction-like possibilities.

Against the sci-fi-like technological reality, laws concerning these technologies may seem antiquated in contrast. International legal instruments such as the TRIPS Agreement, which is now 20 years old, were drafted and negotiated against the backdrop of even earlier technologies. The Agreement lays down as a matter of principle, that patent protection of technological innovation shall be neutral. The technological neutrality principle enshrined in the TRIPS Agreement seems to include an obligation for a member state to apply patent norms in a non-discriminating manner in the assessment of availability of rights and in the enjoyment of the rights, regardless of the field of technology, the national identity of the inventor and the place of the invention.

⁵ See for example, literature on cloud computing, J.Q. Anderson & H. Rainie (2010), The Future of Cloud Computing. For prediction, see for example, N.G. Carr (2005), The End of Corporate Computing, 46 MIT SMR 2005.

⁶ For example, 3D printers printing parts and food, seemed to be stemming from the idea of a "replicator" shown in a movie Star Trek. R. Gray (2013), NASA to send 'Star Trek Replicator' to Space Station, The Telegraph of 14 August 2013. Also the nearest prior art for tablet device, iPad, arguably comes from Star Trek's "replicator" or their version of electric clip board. See C. Foresman (2010), How Star Trek artists imagined the iPad 23 years ago, Ars Technica of 10 August 2010.

⁷ G.B. Dinwoodie & R.C. Dreyfuss (2012), A Neofederalist Vision of TRIPS: The Resilience of the International Intellectual Property Regime, pp. 66–67.

⁸ TRIPS Agreement, Article 27.

When read literally, the neutrality principle seems to prohibit the exceptional treatment of technology in patent law altogether. However, the gap between technological reality and prospects over the last 20 years calls for a re-examination of the neutrality principle. The norm seems to be at odds with policy and practices facing emerging technologies. New technological prospects often call for exceptional treatment, either to make sure such prospects may be fully developed, or to minimize the harm from the claims of market incumbents fearing competition. Twenty years ago, it was indeed unimaginable that an average consumer with a mobile phone would have access to cloud computing services with global data storage, and would be able to use it to engage 3D printing services. The momentum in technological progress due to the confluence of 3D printing and cloud computing may require an innovation policy to differentiate technologies, and to foster and stimulate business models with functioning markets.

In this context, this paper re-visits the neutrality principle of patent protection found in the TRIPS Agreement and reviews the meaning of the neutrality principle in the age of 3D printing and cloud computing. Clearly, the TRIPS Agreement cannot be read to deprive a nation-state of its policy space, including an option not to subject a certain industry field to patenting. Further, as a matter of patent administration and practice prior to granting, the need to differentiate technological fields remains in the assessment of the availability of rights. ¹⁰ Post-grant, emerging technologies allow new categories of actors to engage in new types of commercial and non-commercial conducts. With respect to 3D printing and cloud computing, industries are forming and are currently defining their own boundaries and are creating new cross-border uses. In particular, uses of these technologies may reproduce functional expression to produce products and objects with identical or equivalent functionality. The merger of idea and expression challenges the traditional ontological dichotomy of protection for technical ideas and original expression. Multi-territorially divided use challenges the single entity principle of patent infringement. As these emerging technologies fundamentally test the relevance and utility of technology neutral norms of the TRIPS Agreement, this paper will first examine the exact parameters of technological specificity set down in the TRIPS principle of neutrality of patent protection (i.e. the availability and enjoyment of the patent right); and secondly, explore to what extent and manner the principle of neutrality should be taken into consideration by future international patent norms with regard to these new emerging technologies.

⁹ See for example, M. Lamping et al. (2014), Declaration on Patent Protection – Regulatory Sovereignty under TRIPS, 45 IIC 2014, 679. See also C.M. Correa (2000), Intellectual Property Rights, the WTO and Developing Countries: The TRIPS Agreement and Policy Options; J.H. Reichman (2009), Intellectual Property in the Twenty-First Century: Will the Developing Countries lead or follow?, 46 Hous. L. Rev. 2009, 1115–1185.

¹⁰ See for example, D.L. Burk & M.A. Lemley (2003), Policy Levers in Patent Law, 89 Va. L. Rev. 2003, 1575–1696; G. Van Overwalle (2009), Policy Levers Tailoring Patent Law to Biotechnology: comparing U.S. and European Approaches, 1 UC Irvine L. Rev. 2009, 435–517.

2 Technological Neutrality and Specificity in Patent Law

2.1 Parameters of Technological Neutrality?

The minimum standards for patent protection in the TRIPS Agreement are founded on the principle of technological neutrality. Representatively, Article 27(1) TRIPS, entitled patentable subject matter, is often considered to enshrine technological neutrality of the patent protection. Paragraph 1 declares that "patents *shall be available* for *any inventions*, whether products or processes, *in all fields of technology*" and that "patents shall be available and patent rights *enjoyable without discrimination* as to the place of invention, *the field of technology* and whether products are imported or locally produced." ¹²

On the surface, framed in the language of non-discrimination, the principle of technological neutrality of patent protection seems to be based on the argument of fairness. It is also a common legislative technique to fulfil a broadly conceived goal. As a fairness consideration, in case some inventions of technology are treated exceptionally, this unfair treatment would need to be rigorously justified, using the rationale set forth in the TRIPS Agreement where such exceptions may be employed, such as the exclusion of paragraphs 2 and 3 of Article 27, or meeting the test of the Article 30. Further, the inclusive language of the principle established by the first sentence of Article 27(1) TRIPS Agreement, "all fields of technology," as well as in the negotiation history and preparatory works, suggest that patent protection here aims to cover all ranges of subject matters. As such, it has introduced not only new categories of patent-eligible subject matter, but also new types of a patent claims (i.e. product claims), even in an already existing category of patentable subject matter as well, thus affecting the practices.

¹¹ See G.B. Dinwoodie & C.R. Dreyfuss (2007), Diversifying without Discriminating: Complying with the Mandates of the TRIPs Agreement, 13 Mich. Telecomm. Tech. L. Rev. 2007, 445–456. ¹² Subject to TRIPS Agreement Article 27(2) and (3) (emphasis added).

¹³ See L. Bennett Moses (2007), Recurring Dilemmas: The Law's Race to keep up with Technological Change, 2 J.L. Tech. & Pol'y 2007, 240. See also Y. Gendreau (2000), A technologically neutral Solution for the Internet: Is it Wishful Thinking?, in P. Torremans & I. Stamatoudi (Eds.), Copyright in the New Digital Environment: The Need to Redesign Copyright Perspectives on Intellectual Property Series Vol. 7, pp. 1–16.

Panel Report, Canada – Patent Protection of Pharmaceutical Products, WT/DS114/R, adopted
 April 2000, DSR 2000:V, p. 2289 [hereinafter, Canada Pharmaceuticals].

¹⁵ See D. Gervais (2008), The TRIPs Agreement, Drafting History and Analysis, pp. 334–340.

¹⁶ See for example W. Prinz zu Waldeck und Pyrmont (2009), A special Legislation for Genetic Inventions – a Violation of Article 27(1) TRIPS?, in W. Prinz zu Waldeck und Pyrmont et al. (Eds.), Patents and Technological Progress in a Globalized World, p. 289. In contrast, see G.B. Dinwoodie & C.R. Dreyfuss (2007), Diversifying without Discriminating: Complying with the Mandates of the TRIPs Agreement, 13 Mich. Telecomm. Tech. L. Rev. 2007, 445–456. See also E. Arezzo & G. Ghidini (2011), Biotechnology and Software Patent Law: A Comparative Review of New Developments.

The vision of technologically neutral patent protection is a far cry from the perspective that patent law should be a part of a nation's industrial and innovation policy. An industrial policy may need to employ subjective selection criteria, sometimes extending the privilege or the restrictions of a policy measure to a specific field of industry. In contrast to the neutral outlook of contemporary patent law as a property institution, the subjective policy aspect has long been a part of the patent system. Prior to the TRIPS Agreement, patent laws and the doctrines in the law, particularly the exclusion of patentable subject matter, have been used by national lawmakers as a policy measure, as documented in the history of development in various national patent laws. ¹⁷ Considering this, it is not surprising that the technological neutrality of patent protection provided Article 27(1) TRIPS has produced several disputes on the question of TRIPS compliance of differentiating substantive or procedural legal or other measures. ¹⁸

A literal and formalistic reading of the technological neutrality of patent protection may not allow any form of differentiated treatment in the law, even though such differentiation is caused by the nature of the technology itself. Worse still, a strictly literal and formalistic reading of the technological neutrality of patent protection in the TRIPS Agreement may not allow any form of exceptional treatment, such as exclusion of certain subject matter from patentability, ¹⁹ or a statutory exception applicable only to a certain type of technological invention, ²⁰ as well as any privileges that are directed to a particular field of technology, such as the extension of patent term ²¹ or exceptions that target a particular field only. Indeed,

¹⁷ See, for the examples in developed nations in the case of biotechnological inventions, J. Chambers (2002), Patent Eligibility of Biotechnical Inventions in the United States, Europe, and Japan: How much Patent Policy is Public Policy, 34 Geo. Wash. Int'l L. Rev. 2002, 223. Compare to the examples from developing nations (BRICS) in J.H. Reichman (2009), Intellectual Property in the twenty-first Century: Will the Developing Countries lead or follow?, 46 Hous. L. Rev. 2009, 1115–1185.

¹⁸ See, Appellate Body Report, India – Patent Protection for Pharmaceutical and Agricultural Chemical Products, WT/DS50/AB/R, adopted 16 January 1998, DSR 1998:I, p. 9 [hereinafter, India Pharmaceuticals I]; Panel Report, India – Patent Protection for Pharmaceutical and Agricultural Chemical Products, Complaint by the European Communities and their member States, WT/DS79/R, adopted 22 September 1998, DSR 1998:VI, p. 2661 [hereinafter, India Pharmaceuticals II], which was a dispute on the TRIPS consistency of the Indian "Mailbox Rule" which was a transitional procedure to preserve novelty and priority in respect of applications for product patents for pharmaceutical and agricultural chemical inventions.

¹⁹ See, for example, India Pharmaceuticals I & II, supra fn. 18, which both dealt with the absence of patent protection for pharmaceutical and agricultural chemical products in India. See also, Request for Consultations by the United States, Argentina – certain measures on the protection of patents and test data, WT/DS196/1 of 6 June 2000, which was a dispute on the TRIPS inconsistency of the Argentinian exclusion of micro-organisms from patentability.

²⁰ Canada Pharmaceuticals supra fn. 14.

²¹ See, Request for consultations by Canada, European Communities – Patent Protection for Pharmaceutical and Agricultural Chemical Products, WT/DS153/1 of 7 December 1998, which was a dispute concerning the TRIPS inconsistency of the European two supplementary protection certificate (SPC) regulations, Council Regulation (EEC) No. 1768/92 and European Parliament and Council Regulation (EC) No. 1610/96, which apply only to pharmaceutical, agricultural and chemical products.

one of the most controversial disputes to date concerns in particular neutrality—how the principle of technological neutrality of protection may be read in the context of rules for limitation and exception. In *Canada Pharmaceuticals*, the panel has subjected the rules for exceptions of Article 30 to the non-discrimination requirement of Article 27(1).²²

Technological realities are not uniform. The neutrality principle has to be understood in the context of a complex and non-uniform technological reality. The need to tailor patent law to ever more complex technological and industrial realities has been studied thoroughly using various academic concepts such as technological specificity, ²³ policy levers²⁴ and micro or macro exceptionalism²⁵ in patent law. In their influential work, Burk and Lemley have identified what they call "policy levers" in the US patent law, i.e. doctrinal elements in the law that allow judges to tailor seemingly technologically neutral patent laws to suit the complex reality of different technologies. ²⁶ Similarly, Van Overwalle explored the issue of technology specificity in the framework of European patent law with specific reference to the biotechnology sector.²⁷ Van Overwalle points out several layers and types of policy levers in the context of biotechnology, notably statutory macro and judicial micro policy levers, which function in a differentiated manner.²⁸ We have also observed elsewhere, in the computer program inventions in the context of the European Patent Convention (EPC), 29 that the neutral statutory language of Article 52(1) seems to have been applied in a technologically specific manner in practice, while the specific statutory exclusion of computer programs as such from patentability seems to have been applied in a technologically neutral manner.30

²² Canada Pharmaceuticals supra fn. 14.

²³ See D.L. Burk & M.A. Lemley (2003), Policy Levers in Patent Law, 89 Va. L. Rev. 2003, 1575–1696; G. Van Overwalle (2009), Policy Levers tailoring Patent Law to Biotechnology: Comparing U.S. and European Approaches, 1 UC Irvine L. Rev. 2009, 435–517. Compare R. Polk Wagner (2004), Of Patents and Path Dependency: A Comment on Burk and Lemley, Berkeley Tech. L.J. 2004, 1341.

²⁴ See D.L. Burk & M.A. Lemley (2003), Policy Levers in Patent Law, 89 Va. L. Rev. 2003, 1575–1696; G. Van Overwalle (2009), Policy Levers tailoring Patent Law to Biotechnology: Comparing U.S. and European Approaches, 1 UC Irvine L. Rev. 2009, 435–517.

²⁵ R. Polk Wagner (2002), (Mostly) against Exceptionalism, U. of Penn., Inst. for Law & Econ. Research Paper 02-18.

²⁶ D.L. Burk & M.A. Lemley (2003), Policy Levers in Patent Law, 89 Va. L. Rev. 2003, 1575–1696.

²⁷ G. Van Overwalle (2009), Policy Levers tailoring Patent Law to Biotechnology: Comparing U.S. and European Approaches, 1 UC Irvine L. Rev. 2009, 435–517.

²⁸ Ibid.

²⁹ Convention on the grant of European patents (European Patent Convention), of 5 October 1973, as amended [hereinafter EPC], Article 52.

³⁰ R.M. Ballardini et al. (2013), The "one-size-fits-all" European Patent System Challenges in the Software Context, in K. Weckström (Ed.), Governing Innovation and Expression: New Regimes, Strategies and Techniques, pp. 327–350.

As observed in these works, targeting statutory language of the law either as a rule or an exception to the complex technological reality in anticipation of future technology is nearly impossible. A technologically neutral rule invites discussions on its exceptions, just as a specific exception would raise questions on its scope, as a broad exception may make it a rule. As such, it may be unavoidable that patent protection is technologically neutral in principle (i.e. in the statutes), but may be applied in a technologically specific manner to fit the technological reality (i.e. judicial doctrines or through soft-law devices). Likewise, a neutrality obligation may apply both to the rules and application, and limitation of the scope of this obligation may also be explored from both angles.

2.2 Technologically Neutral Availability of Patent Protection

The text of the Article 27(1) TRIPS does not set clear parameters for technologically neutral availability of patent protection, thus leaving room for interpretation. The WTO's panels³² and appellate body³³ referred to Article 31 of the Vienna Convention on the Law of Treaties (VCLT) for interpretation, based on the treaty text,³⁴ which calls for a "contextualized ordinary meaning",³⁵ as well as Article 32 for supplementary means of interpretation.³⁶ However, they offer little guidance for interpretation, as the core terms, such as *technology* and *invention*, as well as novelty and inventive step are deliberately left undefined. Interpretation of these terms is crucial to understanding the nature of obligation, as they "operate as the mechanism by which other values found in both IP and non-IP instruments . . . are taken into account" in clarification of TRIPS compliance.³⁷

An ordinary meaning of the availability of patent protection includes patentability conditions that form the basis of the system of grant and registration. Pre-grant neutrality would thus include neutrality in norms on inherently patentable subject matter, industrial applicability, as well as inventive quality of the claimed invention (i.e. novelty, inventive step) and disclosure. Some of these norms, i.e. norms on the

³¹ See D.L. Burk & M.A. Lemley (2003), Policy Levers in Patent Law, 89 Va. L. Rev. 2003, 1575– 1696

³² Canada Pharmaceuticals supra fn. 14.

³³ India Phamaceuticals I, supra fn. 18, at paras. 42–48. The panel noted that legitimate expectations are reflected in the text of the treaty itself.

³⁴ Vienna Convention on the Law of Treaties (1969) UN Doc. A/Conf.39/27, ILM 8,679 [hereinafter VCLT], Article 31(1) which reads "A treaty shall be interpreted in good faith in accordance with *the ordinary meaning* to be given to the terms of the treaty *in their context* and in the light of its object and purpose." (emphasis added).

³⁵ I. Van Damme (2009), Treaty Interpretation by the WTO Appellate Body, pp. 213–223.

³⁶ VCLT Article 32.

³⁷ R.C. Dreyfuss & S. Frankel (2014), From Incentive to Commodity to Asset: How International Law is reconceptualizing Intellectual Property, 36 Mich. J. Int'l L. 2014, 14–53.

patentable subject matter, are categorical and may reflect a policy decision utilizing a macro-level policy lever. A categorical norm may be viewed as macro-level technology exceptionalism, which may run against the neutrality principle. However as long as the underlying rationale behind the law remains unaffected, i.e. that patent law protects an invention of technology, then categorical differentiation such as the exclusion of non-invention or non-technology from patentability should be allowed. Legislative examples on the categorical exclusion of patentable subject matter justified in this manner are plenty. The Japanese Patent Act uses the statutory definition to exclude ineligible subject matter such as natural law claimed as such, based on the theory of non-technology. Similarly, exclusion of abstract ideas from patent-eligible subject matter was recently reaffirmed by the US Supreme Court. Most notably, the EPC, which was amended in 2000 for TRIPS compliance, among others, still contains a list of subject matters excluded as such in Article 52 (2). The list is considered non-exhaustive, including non-technological invention or non-inventions.

Rules on industrial applicability have also sometimes been used as a categorical norm. There are several legislative and judicial examples that show some technological invention may be defined categorically as industrially inapplicable. In Japan, without categorical statutory exclusion, medical methods, including methods for diagnosis, surgery and treatment, are flexibly excluded based on industrial inapplicability, crafted through a series of case laws and examination guidelines. ⁴² In the US, it has been noted that the utility requirement is used as a macro policy lever applying to a particular industry, based on case laws and guidelines. ⁴³ In Europe, there is categorical legislation directed toward a particular

³⁸ See Article 2(1) Japanese Patent Act, Law No. 121 of 1959, English translation available at: http://www.japaneselawtranslation.go.jp/law/detail/?id=42&vm=04&re=02&new=1 (accessed 25 August 2014).

³⁹ Alice Corporation Pty. Ltd. v. CLS Bank International 573 U.S.—(2014). See also Bilski v. Kappos, 561 U.S. 593 (2010).

⁴⁰ Arguably TRIPS compliance may be questioned. There is at least one author who argues that the exclusions may be viewed TRIPS inconsistent. D. Schiuma (2000), TRIPS and Exclusion Software 'as such' from Patentability, 31 IIC 2000, 36. See also EPO Technical Board of Appeal, Computer Program Product, T 1173/97, ECLI:EP:BA:1998:T117397.19980701. In a decision that was not followed, the EPO Technical Board of Appeal stated "it is the clear intention of TRIPS not to exclude from patentability any inventions, whatever field of technology they belong to, and therefore, in particular, not to exclude programs for computers as mentioned in and excluded under Article 52(2)(c) EPC," prior to the revision.

⁴¹ Deletion of the excluded subject matters was discussed but not adopted finally. See Conference Proceedings for Conference of the contracting states to revise the 1973 European Patent Convention Munich, 20 to 29 November 2000. MR/24/00 at 69–71.

⁴² See, N. Lee (2013), Patentability of Medical Methods in Japan, in J. Drexl & N. Lee (Eds.), Pharmaceutical Innovation, Competition and Patent Law: A Trilateral Perspective, 2013, pp. 85–108.

⁴³ D.L. Burk & M.A. Lemley (2009), The Patent Crisis and how the Courts can solve it, pp. 110– 112.

technology which contains macro-level policy levers. 44 The EU Biotech Directive provides rules on industrial applicability that apply categorically to inventions related to a gene sequence. 45 These examples show that industrial applicability may also be used as a categorical norm in cases where the industry is currently defining the meaning of "industry," as opposed to "research." When industry is not clearly defined, inventions may be considered more of a discovery of information, which may require further instances of translation and application. Defining them as technology or industrial technology would subject them to the neutrality principle. The necessity to treat such inventions differently from others becomes clearer when one considers recent controversies surrounding the diagnostic testing method for breast cancer genes, BRCA 1 and 2, both in the US and Europe. 46

In contrast to patentable subject matter and industrial applicability, other more individual and relative patentability requirements may seem to be less affected by the logic of neutrality, as they are not categorical norms. Statutory rules for novelty, inventive step as well as disclosure in patent law are often drafted in a technologically neutral manner, without any reference to a particular category of technology. For example, under the EPC, novelty is destroyed by the state of the art, ⁴⁷ and the claimed invention is inventive if it is not obvious to the person skilled in the art, ⁴⁸ and that an invention should be disclosed in a manner sufficiently clear and complete (written description) for it to be carried out by a person skilled in the art. ⁴⁹ The rules refer to no particular field of technology, and on the surface they are technologically neutral. Upon closer examination, however, it is noted that their application in practice is inevitably tailored, as demanded by the nature of technology. ⁵⁰

Considering the above arguments, it is possible to observe that technology, as a filtering concept in patent law, may be unhelpful to define availability of

⁴⁴ Directive 98/44/EC of the European Parliament and of the Council of 6 July 1998 on the Legal Protection of Biotechnological Inventions, Official Journal L 213, 30/07/1998 P. 0013–0021, [Hereinafter EU Biotech Directive], Article 5(3).

⁴⁵ EU Biotech Directive, Article 5(3). See G. Van Overwalle (2009), Policy Levers tailoring Patent Law to Biotechnology: Comparing U.S. and European Approaches, 1 UC Irvine L. Rev. 2009, 459–469.

⁴⁶ See Association for Molecular Pathology v. Myriad Genetics, 569 U.S. 12-398 (2013). See Myriad's European patents have been more limited as results of oppositions. See documenting the process, G. Matthijs et al. (2013), The European BRCA Patent Oppositions and Appeals: Coloring inside the Lines, 31 Nature biotechnology 2013, 704–710.

⁴⁷ EPC. Article 54(1).

⁴⁸ EPC, Article 56.

⁴⁹ EPC, Article 83.

⁵⁰ D.L. Burk & M.A. Lemley (2003), Policy Levers in Patent Law, 89 Va. L. Rev. 2003, 1575–1696 and D.L. Burk & M.A. Lemley (2009), The Patent Crisis and how the Courts can solve it, pp. 110–112. Burk and Lemley identified that the CAFC have used pre-grant policy levers, in the context of the US patent law. Similarly, Van Overwalle identified those used by the EPO in each standard. See G. Van Overwalle (2009), Policy Levers tailoring Patent Law to Biotechnology: Comparing U.S. and European Approaches, 1 UC Irvine L. Rev. 2009, 435–517.

protection.⁵¹ Facing indeterminacy, several commentators thus correctly highlight the aspect of discrimination rather than the definition of technology. Differentiation is viewed to be TRIPS compliant and member states still have the latitude to adopt differentiating protection on their own.⁵² The policy levers used by the courts or patent administration are identified to be such tools that implement *differentiating standards*, while maintaining technologically *neutral rules* of patent protection.⁵³

Whether the obligation of technological neutrality of patent protection extends not only to the rules (i.e. statutory law in principle) but also to the standards, including judicially made doctrines, and soft-law instruments (i.e. administrative practices) is a point that needs further exploration. Kahin applies this concept to the rules (statutory) and standards (court-set practices, doctrinal elements and agency guidelines) and argues that differentiation may be based on standards and may even adopt technologically neutral language, but may be applied flexibly and operate in a technologically specific manner. 54 When understood from the general statement of Article 1(1) TRIPS on the nature of TRIPS obligations that members shall give effect, and that "giving effect" is understood to be a broad concept, 55 this may include both the rule (legislative changes) as well as the practices based on the authorities of the member states (judicial, administrative). In the first case that went through the entire WTO dispute settlement process, *India Pharmaceuticals I*, ⁵⁶ the appellate body found an implementation of TRIPS via administrative regulations or practice was not non-compliant as such, but when it is not sufficiently formalized, a de facto administrative process may run the risk of lacking predictability.

However, it did not clarify the question of whether the standards used to avoid rigidity of literally compliant rules would be held in violation of TRIPS obligations. When the question resurfaced in in *Canada Pharmaceuticals*, the panel distinguished the concept of de jure and de facto discrimination, and noted that "discrimination may arise from explicitly different treatment, sometimes called 'de jure discrimination', but it may also arise from ostensibly identical treatment which, due to differences in circumstances, produces differentially disadvantageous effects, sometimes called a de facto discrimination." As noted, distinction of de facto discrimination and a justifiable difference is a complex issue, as the law cannot take

⁵¹ See for example, J. Pila (2010), The Future of the Requirement for an Invention: Inherent Patentability as a pre-and post-patent Determinant, in E. Arezzo & G. Ghidini (Eds.), Biotechnology and Software Patent Law: A Comparative Review on New Developments, p. 57.

⁵²G.B. Dinwoodie & C.R. Dreyfuss (2007), Diversifying without Discriminating: Complying with the Mandates of the TRIPs Agreement, 13 Mich. Telecomm. Tech. L. Rev. 2007, 450.

⁵³ See D.L. Burk & M.A. Lemley (2003), Policy Levers in Patent Law, 89 Va. L. Rev. 2003, 1575–1696 and G. Van Overwalle (2009), Policy Levers tailoring Patent Law to Biotechnology: Comparing U.S. and European Approaches, 1 UC Irvine L. Rev. 2009, 435–517.

⁵⁴ B. Kahin (2007), Patents and Diversity in Innovation, 13 Mich. Telecomm. Tech. L. Rev. 2007, 380_300

⁵⁵ See D. Gervais (2008), The TRIPs Agreement, Drafting History and Analysis, pp. 163–166.

⁵⁶ Appellate Body Report, India – Patent Protection for Pharmaceutical and Agricultural Chemical Products, WT/DS50/AB/R, adopted 16 January 1998, DSR 1998:I, p. 9.

⁵⁷ Canada Pharmaceuticals supra fn. 14, para. 7.94.

all aspects of technological reality, including those that are yet to emerge, into consideration. Some level of differentiation caused by the changing nature of technology is unavoidable. Standards defer much decision making to the technological facts of each case. Such technological differentiation in application should not be considered discriminatory. Furthermore, a stricter interpretation may be seen to be contrary to the understanding that the decision on the method of implementation is left to the member states as provided in Article 1(1) TRIPS.

2.3 Technological Neutrality in Enjoyability of Patent Rights

The technological neutrality principle affects the rules concerning assertion of patent and enforcement. In addition to the technologically neutral availability of patent protection, TRIPS seems to demand the rules concerning post-grant enjoyability of a right be technological neutral. However, the relevance of the neutrality obligation of enjoyability of rights may be viewed as somewhat limited, as the general substantive issues concerning the post-grant assertions of the patent rights such as scope of rights and interpretation of the patent claims, as well as actor-specific standards for infringement liability (i.e. direct or indirect liability) are not considered part of the TRIPS Agreement. The nature of a patent property right also remains outside the realm of the TRIPS Agreement, thus leaving the issues of sole or joint ownership, and conditions for transfer of ownership as well as notification of such property title to the public largely with the member states. However, some aspect of it as a property title is included in the Article 28, which includes "the right to assign, or transfer by succession, the patent and to conclude licensing contracts."

Some clues may be found in connection to the economic conducts provided for under Article 28(1) and Article 6 footnoted to these conducts, the limitations and exception rule under the Article 30, as well as other uses without authorization of the right holder under Article 31. TRIPS Article 28(1) provides, "for product patent at least a right to (a) prevent third parties not having the owner's consent from the acts of: making, using, offering for sale, selling, or importing for these purposes that product" and for a process patent "(b) to prevent third parties not having the owner's consent from the act of using the process, and from the acts of: using, offering for sale, selling, or importing for these purposes at least the product obtained directly by that process." Arguably, if there is a national rule that deprives a patent holder or biotechnology process claim holder from exercising his right to prevent others from importing a product obtained by the use of the product, such would likely be in violation of TRIPS obligations. Similarly, it would

⁵⁸ See texts accompanying supra fn. 9.

⁵⁹ TRIPS Article 28(2).

⁶⁰ TRIPS Article 28(1).

likely be viewed as non-compliant, if the minimum remedies that are provided under Articles 44 and 45 against the conducts of uses for these patents are not available to patents in the particular field of technology.

On the other hand, as argued in the above, national rules or standards related to the exercise of the rights may differentiate but not discriminate, and these are subject to limitations and exceptions. If read strictly, the marketing of medicines subject to regulatory approval would be against the neutrality principle. However, on a closer look, a restriction on active use of the right subject to marketing approval, as in the agro-chemical and pharmaceutical industries, does not deprive the right holders of their normal right to exclude others. Further, such approval is excused, as the technological reality and their relevance to public health demands differential treatment of products embodying patented inventions.

As for actions which are not included as part of these conducts, such as stockpiling, storing and exporting, which are found in the laws of some of the member states, there seems to be room left for interpretation as to how these conducts relate to the explicitly prohibited conducts. If storing is for sale, as we have seen in *Canada Pharmaceuticals*, such is not allowed.⁶¹ In contrast, a limited exception targeting only a specific technology in a specific situation, for example as shown above, seems to be allowed in practice.⁶² Likewise other technologically specific limitations and exceptions, either statutory or as a form of defence against particular types of innovation, such as defence against claims of infringement in a differentiated subject matter such as pure computer programs or purely business method innovations, may very well be justifiable under the Article 30 as they may be targeting a specifically limited class of patents that should not have been granted in the first place.

Similarly, norms that differentiate product and process claims thus provide a different scope of protection for different types of claims and would be obviously an acceptable form of differentiation that deals with technological realities. However, more questionable is the case where the nature of technology is such that the invention may be described both as a product and a process, and where restrictive rules or standards for the exercise of the rights target a specific type of technology claimed in particular manners only. For example, limiting the scope of protection to the disclosed function for a biotechnology in Europe, as provided in the Article 9 of the EU Biotechnology Directive, 63 may be considered problematic in this regard. There is at least one author who claims that this practice is discriminatory, as absolute product protection is denied in a technologically specific manner. 64 However, such rigid understanding of the obligation to make TRIPS a supranational

⁶¹ Canada Pharmaceuticals, supra fn. 14.

 $^{^{62}}$ See for example, Bolar type exception to meet regulatory approval, Canada Pharmaceuticals, supra fn. 16.

⁶³ EU Biotech Directive, Article 9, supra fn. 46.

⁶⁴ See W. Prinz zu Waldeck und Pyrmont (2009), A special Legislation for Genetic Inventions – a Violation of Article 27(1) TRIPS?, in W. Prinz zu Waldeck und Pyrmont et al. (Eds.), Patents and Technological Progress in a Globalized World, p. 304.

uniform code deprives member states of the freedom to implement it.⁶⁵ As the Agreement is deliberately without core conceptual definition, it leaves member states some latitude to address general problems raised by emerging technologies. When the TRIPS compliance issue was raised in the *Monsanto* case,⁶⁶ the ECJ noted that,

the interpretation of Article 9 of the Directive limiting the protection it confers to situations in which the patented product performs its function does not appear to conflict unreasonably with a normal exploitation of the patent and does not "unreasonably prejudice the legitimate interests of the patent owner, taking account of the legitimate interests of third parties", within the meaning of Article 30 of the TRIPS Agreement.⁶⁷

And this, despite the fact that TRIPS did not affect its interpretation given to Article 9 of the Directive. ⁶⁸

Logically, whatever the constructed rationale of the rule might be, there may be conducts that are not included in the explicit language of Article 28(1) such as that of scanning, repairing, shipping and storing for these purposes. A neutrally enjoyable patent right should not deprive the flexibility of members states to allow these conducts to occur for innovative benefits without the restriction from the patent right holders if necessary. Furthermore, the parameters for the obligation for technologically neutral enjoyment of patent rights need to take into the general rationale for the TRIPS agreement itself as provided in Article 7 and the principle in Article 8, ⁶⁹ and may be even the general purpose of the WTO-TRIPS Agreement itself, i.e. market access and trade liberalization.

3 Technological Neutrality of Patent Protection and 3D Printing in the Cloud

The principle of technological neutrality of availability of patent protection and enjoyability of patent rights seems to present an orderly solution to the complexities posed by emerging technological changes, as all technologies both present and future would receive patent protection. However, the need to limit the neutrality of protection seems to arise with respect to emerging technologies—such as 3D printing and cloud computing.

3D printing is a new method of manufacturing objects based on additive manufacturing, "a process of joining materials to make objects from 3-D model

⁶⁵ See G.B. Dinwoodie & R.C. Dreyfuss (2012), A Neofederalist Vision of TRIPS: The Resilience of the International Intellectual Property Regime, p. 19.

⁶⁶ Monsanto Technology v Cefetra BV and Others, C-428/08, EU:C:2010:402.

⁶⁷ Ibid., para. 76.

⁶⁸ Ibid., para. 77.

⁶⁹ See P.K. Yu (2009), The Objectives and Principles of the TRIPS Agreement, 46 Hous. L. Rev. 2009, 979.

data, usually layer upon layer, as opposed to subtractive manufacturing methodologies." As an additive manufacturing practice, 3D printing technology requires data files on physical objects that may be processed to print the objects. In addition to a proper apparatus that can scan as well as print the object in 3D, 3D printing requires data storage and data processing technology. Cloud computing or cloud services provide a solution as well as support concerning the data storage and processing aspect of the 3D printing industry. Cloud computing is a computer-program-based solution to data storage and processing. Cloud computing platforms or services utilize networked computers (the Internet) to provide users with access to computing capacity beyond that of an individual computer as well as enable ubiquity of access and storage capacity regardless of local capacity. Both 3D printing and cloud computing are a further application of digital computing technologies, developing in tandem, using pervasive Internet and communication technologies.

The combination of 3D printing and cloud computing represent two of the many technological changes that were unimaginable a few decades ago when the TRIPS Agreement was drafted and signed. However, as long as 3D printing and cloud computing are viewed and definable as "technologies", the conditions of the TRIPS Agreement would apply. As the discussion on the controversy surrounding the biogenetic technology has shown, 71 defining one category of knowledge as technology would open doors to the claims for neutral availability of patent protection and enjoyability of rights under the TRIPS Agreement. The crucial question, once they are defined as technologies, is whether they still need to be differentiated for efficient market development, and whether it is possible to argue that their pervasive uses would demand an exception targeting these technologies.

3.1 Neutrality of Rules and 3D Printing and the Cloud Computing

Emerging technologies often present numerous challenges for regulators. There may be a legal necessity to regulate or restrict the use of a new technology out of concern for the public. For example, if new ethical, moral as well as safety concerns are raised regarding the use of 3D printing to "print" medicines, weapons or other regulated products. During a transition period, legal uncertainty may persist until norms and practices settle, as well as scepticism on the existing legal arrangement due to the inadequacy and obsolescence of the existing rules.⁷²

 $^{^{70}\,\}mathrm{H.}$ Lipson & M. Kurman (2010), Factory @ Home: The Emerging Economy of Personal Manufacturing.

⁷¹ See texts accompanying supra fn. 47.

⁷² See L. Bennett Moses (2007), Recurring Dilemmas: The Law's Race to keep up with Technological Change, 2 J.L. Tech. & Pol'y 2007, 240.

At the outset, it should be noted that a natural consequence of a patent system that incentivizes technological progress is that more subject matters of protection result. By the very success of the system, there should be ever increasing quantities of potentially claimable innovation and invention. However, not all commercially valuable innovation may need to be protected as object of a property, subject to rules of exclusion. Emerging technologies thus present law and policymakers with a choice. A decision of excluding a subject matter might mean that it cannot be logically regulated with patent property rules. On the other hand, it may be ethically or morally wrong to regulate a subject matter with patent property rules, and the overall efficiency of the system demands that these values are left unregulated by such rules. In other words, emerging technologies present a challenge to the expanding boundaries of patent law. An inclusive rule through the principle of technological neutrality, as we have seen in the above, however suffers from overinclusiveness or under-inclusiveness as the legal concepts include levels of abstraction, and thus precise targeting is difficult, ⁷³ especially the definition of the core concepts of regulation—technology and industry—are left with the stake holders themselves.

In the area of 3D scanning and printing, the industry is defining its own field, both commercially and privately. Currently, 3D printers may produce products with various materials, ranging from toys, to food, to decorative items such as lampshades and jewelry, eyeglasses, car spare parts, functioning apparatuses, construction parts, as well as medical devices. There are also claims that human body parts such as ears, and skin as well as parts of organs may be printed in this manner as the technology allows for personalization and works well with complex designs. 3D scanners and printers are already used by the businesses who employ the technology simply as an extension of commercial manufacturing⁷⁴ and thus engage in "making" and selling things. In parallel, 3D printing has created a budding space of exchange for do-it-yourself (DIY) enthusiasts and hobbyist. Over the years, the costs for 3D printing technology has dropped considerably, and private end users already have access to 3D printing at home, either through printing services such as Shapeways or affordable home-use 3D printers. 75 Indeed, in 2014, Time magazine selected 3D printing as one of the 25 best inventions of the vear.76

Cloud computer services, likewise, have gained in popularity, and it has become nearly a mundane technology used by businesses and private users alike. Through ubiquitous accessibility, cloud computing has transformed the perceptions regarding the use of the digital content, from ownership to service performance. Through promises of cost cutting on the part of cloud computing services, some even predict

⁷³ Ibid.

⁷⁴ See for examples listed in the website of Stratasys.

⁷⁵ See for example, MakerBot replicator mini is set at the price of 1375 USD, available at: http://store.makerbot.com/replicator-mini (accessed on 14 October 2014).

⁷⁶ TIME (2014). The 25 Best Inventions of 2014. TIME of 20 November 2014.

that cloud computing effectively signals the end of corporate computing.⁷⁷ 3D printing and cloud computing platforms and services, as well as their potential to become a pervasive technology or even a general purpose technology raise a multitude of questions for legal futurists.⁷⁸

A regulatory need exists to restrict certain goods from 3D printing. Likewise, security and privacy concerns on the data shared and posted on the cloud, test whether cloud services need tighter public scrutiny. These concerns highlight an actual necessity for greater regulation of 3D printing and cloud services, and adoption of regulatory measures through extending product liability to assisted manufacturing or at-home personal manufacturing. Intellectual property right holders point out the fact that 3D scanning and printing through cloud services involves sharing data files to print physical objects already protected by IP rights. They raise concerns for more or less regulation across the fields of intellectual property, as well as adjacent conduct regulations such as unfair competition protection as well as general contract law. In sum, to an extent, emerging technologies logically create a limited regulatory experimentation until the nature of technologies is well understood. For technologically neutral patent protection such as the TRIPS Agreement as explored above in Sect. 2, the focus should be on whether TRIPS limits the possibility of such regulatory experimentation.

3.2 3D Printing Technology and Cloud Computing as New Subject Matter

3D scanners and printers connected to the Internet in conjunction with cloud computing bring about not only *new patentable subject matter* (new technology) that calls for patent protection, but also a *new conduct of use* by *new actors*, ⁷⁹ as shown by the model of the behaviour in the figure. As a technology, 3D printing includes an apparatus to scan, print and process data, as well as the materials used to print things. Currently plastic filament spools made of plastic pellets or pellets themselves are most commonly used, but metals, concrete as well as organic materials including food are being experimented with. Any of the these objects (including filaments) and apparatuses, in their entirety or parts of them, or the processes or methods of making these objects themselves could be subject to patent

⁷⁷ See for example, N.G. Carr (2005), The End of Corporate Computing, 46 MIT SMR 2005.

⁷⁸ For a critique of legal commentator's penchant for legal prediction for things not yet happened to solidify the importance of the discipline, see B. Beebe (2013), Fair Use and Legal Futurism, 25 Law & Lit. 2013.

⁷⁹ D.R. Desai & G.N. Magliocca (2014), Patents, meet Napster: 3D Printing and the Digitization of Things, 102 Geo. L.J. 2014, 1691–1841; S. Bradshaw, A. Bowyer & P. Haufe (2010), The Intellectual Property Implications of Low-Cost 3D Printing, 7 ScriptEd 2010, 5–31. See also D. Mendis (2013), The Clone Wars – Episode 1: The Rise of 3D Printing and its Implications for Intellectual Property Law – Learning Lessons from the Past?, 35 EIPR 2013, 155–169.

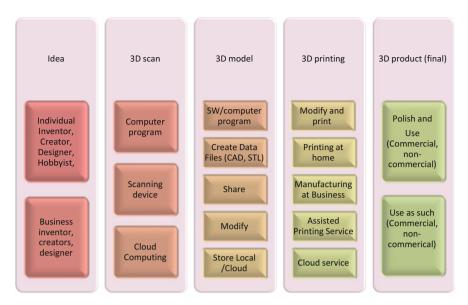


Fig. 1 Technology and Conduct Model of 3D printing: author's own compilation

protection without much controversy, as they would be considered part of accepted technology.

The core of the 3D printing process is the method of additive manufacturing through melting and fusing materials, including selective laser sintering (SLS) technology and fused deposition modelling (FDM). The first wave of these technologies was patented more than 20 years ago, and as a result, several relevant patents have expired or are expected to expire soon. Ironically, it is widely acknowledged that the expiration of these patents has led to the current boom in experimentation with improvement technologies as well as the lowering of costs for 3D printers. A second wave of patents is currently being filed and applied for pertaining the improvement of these technologies, as well as various applications of the basic methods with different industries.

Comparatively more questionable patents would be related to the computer programs that are used to process 3D scan data. 3D printing and cloud computing as new patentable subject matter are not problematic in most countries, as the technology of 3D scanning (i.e. signal, image or data processing) and the software that creates and modifies CAD files (data structures) are computer programs or computer program implemented inventions. Patent protection for them, as well as for cloud computing would first be decided by whether a particular claim is directed to the invention of technology (technical invention) or to an abstract idea (i.e. computer programs as such, abstract algorithms) which is often patent

⁸⁰ For examples, U.S. Patent No. 4575330 Apparatus for Production of Three-Dimensional Objects by Stereolithography, as well as, U.S. Patent No. 5121329, Fused Deposition Modelling.

ineligible. Among the computer program related claims, more questionable would be the computer program readable data structures, and if patent claims can be read to include underlying data structures (see Fig. 1).

If we accept that a computer program is patentable subject matter, then the claims directed to 3D scanning/printing and cloud computing technologies may be considered not only uncontroversial but also demanded by TRIPS obligations.⁸¹ The practice and law seems to have been settled in Europe through rather inclusive interpretation by the EPO's so-called "any hardware approach" on patent eligibility of computer programs, i.e. the claimed subject matter is not excluded if it specifies at least one feature which is not excluded subject matter. 82 In practice this means a rejection would likely to have to be based on inventive step rather than categorical exclusion.⁸³ The European practice seems to be in contrast to a more recent restrictive approach in the US. 84 Decisions in the US have recently taken a more restrictive approach toward the patent eligibility of computer implemented financial transactions, ⁸⁵ or methods of hedging the risk of price changes. While the Supreme Court in Bilski did not categorically deny the availability of patent protection for a computerised business method, ⁸⁶ it has limited the scope of eligible subject matter, which was seen to have been expanded through interpretations by the Court of Appeals for Federal Circuit (CAFC).⁸⁷ In either of these approaches, the statutes do not clearly provide or deny availability of patent protection to emerging technologies such as 3D printing or cloud computing and their applications. The availability is not categorically defined in the rules, but patent protection seems to be decided based on whether the claims before the courts, in fact, describe abstract ideas or excluded subject matter as such.

⁸¹ See text accompanying supra fn. 42.

⁸² The approach of the EPO Technical Board of Appeal was referred to as "any hardware approach" by a UK judge, Jacob LJ in Aerotel Ltd. v. Wave Crest Group Entertainment Ltd. and others [2009] EWCA Civ. 408 at para. 26. The three decisions cited are EPO, The Controlling pension benefits system/PBS Partnership, T 0931/95, EP:BA:2000:T093195.20000908, OJEPO 441; EPO, Auction method/Hitachi, T 0258/03, EP:BA:2004:T025803.20040421, OJEPO 575 and EPO, Clipboard formats I/Microsoft, T 0424/03, EP:BA:2006:T042403.20060223. Compare T 1173/97, supra fn. 42, to EPO Enlarged Board of Appeal, G 0003/08, Programs for computers, EP: BA:2010:G000308.20100512. Although the enlarged board of appeal dismissed the referral, it has thoroughly discussed the patentability issues and found no inconsistencies in following any hardware approach.

⁸³ See for example, EPO, Item matching/AMAZON, T 0313/10, EP:BA:2012:T031310.20120719, which ruled the claimed computer program method patent eligible but not inventive; see also EPO, T 0414/12, EP:BA:2013:T041412.20130410 concerning a mix of technical and non-technical claims to a electronic gaming apparatus, which rule claimed apparatus patent eligible but not inventive.

⁸⁴ See Alice Corporation Pty. Ltd. v. CLS Bank International, Supreme Court Docket No 13-298 (2014), 573 U. S. (2014). See also, Bilski v. Kappos, 561 U.S. 593 (2010).

⁸⁵ Alice Corporation Pty. Ltd. v. CLS Bank International, Supreme Court Docket No 13-298 (2014), 573 U. S. (2014).

⁸⁶ Bilski v. Kappos, 561 U.S. 593 (2010).

⁸⁷ State Street Bank v. Signature Financial Group, 149 F.3d 1368 (Fed. Cir. 1998).

In sum, the technologically neutral rules of patent subject matter under TRIPS, without definition seem to provide sufficient level of abstractness to shield it from irrelevance or obsolescence, even facing 3D printer and scanning technologies connected to cloud computing services. The absence of definition seems to be a blessing in a sense, as it allows room to manoeuvre in adjusting to emerging technologies and to differentiate them.

3.3 New Conducts of Use and Enjoyment of Rights

Perhaps a more controversial argument may have to be made concerning new conducts of use and new users. 3D printing using cloud services in the above model in the figure shows that a 3D printing process generates the following types of conduct: scanning, modification, creation of data files, modelling, sharing, storing (of data files), and printing. Similarly, in cloud computing and computer programs in general, conducts such as installing and running (executing) a computer program are typically the types of conduct that utilize the technology. When combined, there are new conducts that are connected but carried out in a somewhat fragmented manner, e.g. a user may place an order to 3D print an object based on a data file, which may then be stored in a cloud located in one country and this may be printed in another country and then shipped or "exported" to a third country.

Most of these conducts involve replications of expressions of an object with functional information. In other words, they facilitate conducts that combine two fields of intellectual property law, as it replicates before making that invention, or replicates ("storing"). Replication or copying of a surficial expression of a physical object has traditionally been regulated through copyright. Patent laws on the other hand regulate replication of an inventive idea through doctrinal concepts such as making and using of inventive ideas embodied in the physical objects.

Patent laws in general do not include the conduct of copying or replication into enumerated conduct of uses. Other than the willfulness criteria for patent infringement, patent infringement often is constructed in an objective manner that does not look into knowledge of pre-existing rights over the inventive idea. Replication, i.e. copying, has little place in patent laws' various doctrines concerning infringement, and arguably patent law does not seem to operate to prevent copying. The absence of a copying requirement in patent law also works in favor of right holders. As copying is not required, patent law is the only intellectual property law where an independent invention is not a defense for infringement, and right holders are allowed to control competitors without having to prove that the infringers had knowledge of the patented invention. Infringers are often presumed to have knowledge because patent disclosure as well as registry serve to notify and communicate the existence of patent rights.

⁸⁸ See A.C. Cotropia & M. Lemley (2009), Copying in Patent Law, 37 N.C.L. Rev. 2009, 1421.

One of the reasons for the absence of copying or imitation in patent law could be pragmatic. An intangible inventive idea cannot be shown to be replicated unless someone makes or uses the claimed invention to produce its embodiment. In other words, replication that is infringing cannot be physically shown unless someone invests time, resources and effort to produce physical objects embodying the invention. As such, to an extent, the cost of imitation may prevent exact replication that affects the market for the right holders. Another reason for not highlighting copying or not requiring imitation may be that for policy considerations, replication of an invention, unless it has a physical embodiment may be beneficial for innovation. Replication of ideas or the iteration of inventive ideas is a part of a process of learning. Technical teaching from what is known previously may sequentially improve through various trials and errors including imitation of ideas. Such replication may be less harmful, unless it affects the market for a patented invention. In fact, the economists who have studied the software industry argue that imitation in sequential and complimentary innovation may even be a necessary part of the process of technological progress, and that an exclusive right such as a patent may even be inefficient in such cases.⁸⁹

Replication is also not a part of the economic conducts under TRIPS Article 28 (1). As contemporary copyright law had to consider new types of communication and making digital contents available as an addition or a part of publication, patent laws may also need to adjust the conducts of making a product and using in the context of computer program or computer-implemented invention. Replication of a product and "replicating" a process raise different issues. I have argued elsewhere that making a product and using a process operate differently in the context of a computer program when compared to other types of invention. 90 The scope of protection offered to the conduct of making a product and using a process may be differentiated, as explicitly allowed under the Article 28(1) TRIPS. For a computer program, one may argue that a product claim may provide broader exclusivity including replication of the computer program by copying the coded expression and storing it on a new medium. On the other hand a process or a method claim grants only an exclusive right to prevent "running" of a computer program. 3D scanning and printing and cloud computing technologies build upon computer programming, and they may well be claimed as either a product or process related to computer program technology. A categorical restriction on product claims for these technologies, for example, would likely be TRIPS non-compliant. However, as seen in the Sect. 2, a differentiated scope of protection based on the type of claims of these technologies would not necessarily raise TRIPS compliance issues.

New forms of conduct, such as modification and sharing may also raise issues regarding limitation and exception. Particularly, it is possible to consider applying the private use exception or research and experimental use exception for sharing

⁸⁹ See for example, J. Bessen & E. Maskin (2009), Sequential Innovation, Patents, and Imitation, 40 RAND J. Econ. 2009, 611–635.

⁹⁰ See N. Lee (2008), Fragmented Infringement of Computer Program Patents in the Global Economy, 48 I.E. 2008, 355–356.

among users on a non-commercial hobbyist platform. Arguably, the relatively high cost to produce an industrially applicable invention to a certain extent has justified the private use exceptions as private uses would not unreasonably conflict with a normal exploitation of the patent and would not unreasonably prejudice the legitimate interests of the patent holder. However, the accessibility of 3D printing technologies lowers the cost of replication significantly. When a technological feature of a product can be understood from the surface and can be fully scanned, a person, with the help of the disclosure in the patent documents and drawings, may be able to construct a 3D model of the final product. The finally printed product may be fully functional and operate with the same function and in the same way. achieving the same result as the claimed invention, thereby creating a potentially infringing product. 91 Through the doctrine of equivalents, or purposive construction, minor modification or variation that the users customize may be disregarded. In addition to the printing of a fully functional complete object, users may also print parts because 3D printing allows users to print customized units in small quantities. The repair and making conundrum is known in patent law; however, instead of buying the parts from commercial sellers, the users may be able to make the parts to repair a product both in business and at home.

Unlike the US, in most European countries as well as Japan, private use limitation or exception allows these types of making of patented invention by end users. However, when the technology becomes pervasive and easily accessible, and when the consumers share the product printed in this manner, concerns may be raised on the viability of this exception, especially if it affects normal exploitation. In fact, one commentator argues that technological costs have been one of the factors that have been decisive in the evolution of the law, and that the reduction of costs would incite disruptive changes in intellectual property law. 92

Considering this, again, a certain level of experimentation with regulation may be necessary. Would TRIPS technological neutrality concerning enjoyability of rights affect a member state's freedom to regulate the disruption concerning replication in patent law? As argued in the above, conduct that is not covered within the scope of Article 28(1) may be unaffected. However, making, using, selling or importing 3D printed goods or parts may be affected by patent protection. Nonetheless, utilizing the policy space left by Article 30, it may be possible to test a differentiated experimentation with exceptions such as private use, research and experimentation use. A new defense for a freedom to tinker even in commercial space through, for example, creating an explicit *de minimis* exception to making and using may also be considered.

Regarding the neutrality of availability and enjoyability of patent protection in the TRIPS Agreement, the place of invention (i.e. geographic location) should not

⁹¹ D. Doherty (2012), Downloading Infringement: Patent Law as a Roadblock to the 3D Printing Revolution, 26 Harv. J.L. & Tech. 2012, 353; D.H. Brean (2013), Asserting Patents to Combat Infringement via 3D Printing: It's No Use, 23 Fordham Intell. Prop. Media & Ent. L.J. 2013, 771.
⁹² See H. Surden (2013), Technological Cost as Law in Intellectual Property, 27 Harv. J.L. & Tech. 2013, 196–198.

be used as a way to deny protection or enforceability of patent rights. As described above, the 3D printing and cloud service combination presumes there are multiple actors working on parts to produce an end product. They may well be in different geographical locations which may lead to incomplete use of an invention in a given territory. To what extent a multilateral agreement such as TRIPS should take these practices into consideration would be explored rather in an empirical manner including an examination into the extent of harm. For now, technological neutrality of patent protection does not yet reach the level of protection of partial invention in one territory, and as such, member states would have latitude to tailor it.

3.4 New Conducts and Intermediary Liability

Cloud services and cloud computing are innovative technologies that free devices of dependency on the physical location of data. If the Internet provides ubiquity of access, cloud computing services free physical demands from devices of having to store data locally. Similarly, cloud services and cloud computing are accessible, regardless of users' geographical location allowing utilization of this technology globally. 3D printing uses computer aided design (CAD) files that control the printing process. It is also possible to produce own files through a 3D scanner, and cloud computing services allow sharing of these CAD files on various filesharing platforms. As cloud computing allows the computing and storing capacities to be distributed over the Internet, the technology enables easy sharing among the end users without having to maintain large data storage capacity on their own computers or handheld devices. In fact, a 3D scanning device may very well be incorporated into a handheld device, which is connected to the Internet that would allow storing of the data on the cloud, to share, modify or print later.

As parts may be printed and shipped to another part of the world, based on a data file sent by the buyer, indirect patent infringement liability through concerted conduct may be raised. Even with the exception or privileges being granted to private end users, liabilities for the intermediaries who are involved in the commercial value chains are highlighted here all the more.

In the US, the CAFC raised such concern when it found indirect inducement infringement liability even "when a defendant carries out some steps constituting a method patent and encourages others to carry out the remaining steps – even if no one would be liable as a direct infringer in such circumstances". ⁹⁴ Ultimately, the US Supreme Court rejected that theory based on the principle that such liability would still require direct infringement carried out by a single entity. ⁹⁵ However,

⁹³ An example of a design and file sharing platform is Thingiverse.

⁹⁴ Limelight Networks, Inc. v. Akamai Technologies, Inc. 692 F. 3d 1301, 1308–1309 (Fed. Cir. 2012 (per curiam)).

⁹⁵ Limelight Networks, Inc. v. Akamai Technologies, Inc., 572 U. S. (2014).

intermediary liability for the providers of platforms would still be raised if such single entity can be found. To an extent, clever patent claims may provide solutions for multiple actor infringement problems. Further, whether the uploading/storing of a CAD file on a platform in various geographical locations would itself constitute one step toward a patent infringement would also have to be considered.

Sharing files on the cloud, whether among the users of 3D printing communities and also commercial printing services, may expand the liability of patent infringement to platform operators as well as scanning and printing service providers. In 3D printing described in the figure, an object manufactured through 3D scanning/printing connected to the Internet or a cloud service will nearly always be practiced by multiple actors. In this context, delineation of their innovative contribution as well as their liabilities for patent infringement may need to be accounted for.

As seen in the above, Article 28(1) TRIPS leaves some room for member states to regulate infringement liability. Among the economic conducts listed, the conduct of "offer to sell" is generally understood as directed toward preliminary activities relating to a sale. Exactly when preliminary activities become the subject of direct infringement leaves room for interpretation. For example, the text of the TRIPS Agreement does not make clear whether such an offer must result in an ultimate sale or assignment of title for disposal to occur. Is an offer sufficient or must it be met with acceptance leading to a sale? More importantly, an offer for sale may include offer for international sale (exporting) and it is not clear whether this "offer for sale" means that exporting needs to be regulated as a directly infringing conduct. The text of Article 28 does not distinguish direct infringement from indirect or non-literal infringement; it simply provides that members should regulate certain economic activities as infringement.

In sum, several types of conducts are required to be prohibited, but as the member states may choose the manner in which they implement TRIPS obligations, precise means of regulating infringement are left with the WTO member states. As long as it is prohibited, an "offer for sale" may be regulated as an indirect infringement with additional subjective evidence. Combined with Article 1(1), which allows members to freely determine their means of implementation, the effect of Article 28 may be that certain conduct need not always trigger direct infringement liability. Similarly, it is prudent to understand that various modes of non-literal patent infringement are not covered by the text of TRIPS, whether based on the doctrine of equivalents or by secondary liability. In other words, technological neutrality of patent protection enshrined in the TRIPS Agreement does not close the policy space for member states to regulate patent infringement liability for intermediaries or end users in ways that fit their innovation landscape.

⁹⁶ See D. Wu (2013), The Use of Use for Patented Systems in a Single or Joint Infringement World, 14 Colum. Sci. & Tech. L. Rev. 2013, 514–558. See also solutions proposed in L.J. Oswald (2014), Simplifying Multiactor Patent Infringement Cases Through Proper Application of Common Law Doctrine, 51 ABLJ 2014, 1–69.

4 Concluding Remarks

3D printing and cloud computing are good examples to explore the principle of technologically neutral patent protection enshrined in the TRIPS Agreement. As seen in the above, TRIPS still leaves room for member states to differentiate despite the obligation of technological neutrality in terms of availability of patent protection as well as enjoyability of patent rights post-grant. Clearly more room seems to exist in post-grant areas where relatively more latitude is reserved for member states to differentiate and experiment with patent law doctrines. Given such latitude, it is possible to closely examine the innovation incentives for new emerging technologies such as 3D printing and cloud computing. Some commentators and 3D enthusiasts argue that 3D printing is one of the new general purpose technologies that will be pervasive in terms of its applicability, that it improves and lowers costs over time and will incite new inventive potential. ⁹⁷ If indeed we are seeing the birth of new general purpose technologies, the pervasive uses will lead to more innovative capacity surrounding these technological prospects.

One interesting fact is that innovation in technology is often partially sparked by the expiration of patents, as is the case of 3D printing technologies. Alternative technologies are even distributed through an open source model and the technology behind RepRap, which was the first low-cost 3D printer which printed parts itself is freely available. If expiration of patents or alternatives to patent incentivize technological progress, it is questionable whether the exclusive rights of patents property are indeed useful incentives for innovation. As noted by Ullrich, "the purpose of the exclusive rights conferred by a patent could be the 'spurring on' of 'the actual exploitation of the invention in the marketplace', i.e. to 'offer a basket for the collection of ... reward'". 100

During the last two decades, the TRIPS Agreement has widely influenced domestic law making, politics and society, sometimes as either an apology or a utopian ideal beyond its original function as a trade agreement. However, the neutrality principle contained in the TRIPS Agreement is not an absolute standard. As shown by the example of 3D printing technologies, it is rather its expiration that leads to many innovative activities in the market place. Any proposals for new norms will need to heed this fact in the implementation of technologically neutral patent protection required by the TRIPS Agreement—that in the early stage of development of general purpose technologies, absence of patent incentives results

⁹⁷ See D.R. Desai & G.N. Magliocca (2014), Patents, meet Napster: 3D Printing and the Digitization of Things, 102 Geo. L.J. 2014, 1691–1841.

⁹⁸ For example, US patent 5597589, Apparatus for producing parts by selective sintering, expired on 28.1.2014.

⁹⁹ Information for RepRap self-replicating manufacturing machine is found on its website.

¹⁰⁰ H. Ullrich (1989), The Importance of Industrial Property Law and other Legal Measures in the Promotion of Technological Innovation, 28 Industrial Property 1989, 102–103.

 $^{^{101}}$ See M. Koskenniemi (1989), From Apology to Utopia: The Structure of International Legal Argument.

in more innovation. Furthermore, as 3D printing technologies bring the working of patented inventions into private sphere, it is crucial to maintain and even strengthen the exceptions to preserve the freedom to tinker with technologies. Overinclusiveness in the exclusive rights of patents based on unsubstantiated fear of vast infringement may hinder innovation.

References

- Anderson, J.Q., & Rainie, H. (2010), The Future of Cloud Computing, Washington, DC: Pew Internet & American Life Project
- Ballardini, R.M., Lonnqvist, P., Virtanen, P., Lee, N., Norrgard, M. & Pitkanen, O. (2013), The "one-size fits all" European Patent System Challenges in the Software Context, in K. Weckström (Ed.), Governing Innovation and Expression: New Regimes, Strategies and Techniques, Publications of the Faculty of Law at the University of Turku, The private law series. no. 132, pp. 327-350, Turku: Turun yliopisto
- Beebe, B. (2013), Fair Use and Legal Futurism, 25 Law & Lit. Berkeley 2013, CA: University of California Press
- Bennett Moses, L. (2007), Recurring Dilemmas: The Law's Race to keep up with Technological Change, 2 J.L. Tech. & Pol'y 2007, 239, Champaign, IL: University of Illinois College of Law
- Bessen, J., & Maskin, E. (2009), Sequential Innovation, Patents, and Imitation, 40 RAND J. Econ. 2009, 611. Hoboken, NJ: Wiley-Blackwell
- Bradshaw, S., Bowyer, A., & Haufe, P. (2010), The Intellectual Property Implications of Low-Cost 3D Printing, 7 ScriptEd 2010, 5, Edinburgh: University of Edinburgh
- Brean, D.H. (2013), Asserting Patents to Combat Infringement via 3D Printing: It's No Use, 23 Fordham Intell. Prop. Media & Ent. L.J. 2013, 771, New York City, NY: Fordham University School of Law
- Burk, D.L., & Lemley, M.A. (2003), Policy Levers in Patent Law, 89 Va. L. Rev. 2003, 1575, Charlottesville: The Virginia Law Review Association
- Burk, D.L., & Lemley M.A. (2009), The Patent Crisis and How the Courts can solve it, Chicago: The University of Chicago Press
- Carr, N.G. (2005), The End of Corporate Computing, 46 MIT SMR 2005, Cambridge, MA: Massachusetts Institute of Technology
- Chambers, J. (2002), Patent Eligibility of Biotechnical Inventions in the United States, Europe, and Japan: How Much Patent Policy Is Public Policy, 34 Geo. Wash. Int'l L. Rev. 223, Washington, D.C.: George Washington University Law School
- Correa, C.M. (2000), Intellectual Property Rights, the WTO and Developing Countries: The TRIPS Agreement and Policy Options, London: Zed books
- Cotropia, C.A. & Lemley, M. (2009), Copying in Patent Law, 37 N.C.L. Rev. 2009, 1421, Chapel Hill, NC: University of North Carolina School of Law
- Declaration on Patent Protection: Regulatory Sovereignty under TRIPS (Version 1.0 of 15 April 2014), published in 45 IIC 2014, 679, available at: http://www.ip.mpg.de/en/news/declaration_on_patent_protection.html (accessed 20 May 2015).
- Desai, D.R., & Magliocca, G.N. (2014), Patents, meet Napster: 3D Printing and the Digitization of Things, 102 Geo. L.J. 2014, 1691, Washington D.C.: Georgetown University Law Center
- Dinwoodie, G.B. & Dreyfuss, R.C. (2007), Diversifying without Discriminating: Complying with the Mandates of the TRIPs Agreement, 13 Mich. Telecomm. Tech. L. Rev. 2007, 445, Ann Arbor, MI: University of Michigan Law School
- Dinwoodie, G.B. & Dreyfuss, R.C. (2012), A Neofederalist Vision of TRIPS: The Resilience of the International Intellectual Property Regime, Oxford: Oxford University Press

- Doherty, D. (2012), Downloading Infringement: Patent Law as a Roadblock to the 3D Printing Revolution, 26 Harv. J.L. & Tech. 2012, 353, Cambridge: Harvard University School of Law
- Drahos, P. & Braithwaite, J. (2002), Information Feudalism: Who owns the Knowledge Economy?, Oxford: Earthscan
- Dreyfuss, R.C. & Frankel, S. (2014), From Incentive to Commodity to Asset: How International Law is Reconceptualizing Intellectual Property, 36 Mich. J. Int'l L. 2014, 14, Ann Arbor: Michigan Journal of International Law
- Foresman, C. (2010), How Star Trek artists imagined the iPad 23 years ago, Ars Technica of 10 August 2010, available at: http://arstechnica.com/apple/2010/08/how-star-trek-artists-imag ined-the-ipad-23-years-ago (accessed 21 September 2014)
- Gendreau, Y. (2000), A Technologically Neutral Solution for the Internet: Is it Wishful Thinking?, in P. Torremans & I. Stamatoudi (Eds.), Copyright in the New Digital Environment: The Need to Redesign Copyright Perspectives on Intellectual Property Series, Vol. 7, pp. 1-16, London: Sweet & Maxwell
- Gervais, D. (2008), The TRIPs Agreement, Drafting History and Analysis, pp. 334-340, 3rd ed., London: Sweet & Maxwell
- Gray, R. (2013), NASA to send 'Star Trek Replicator' to Space Station, The Telegraph of 14 August 2013, available at: http://www.telegraph.co.uk/science/10242059/Nasa-to-send-Star-Trek-replicator-to-space-station.html (accessed 21 September 2014)
- Hamilton, M.A. (1996), The TRIPS Agreement: Imperialistic, Outdated, and Overprotective, 29 Vand. J. Transnat'l L. 1996, 613, Tennessee: Vanderbilt University Law School
- Harris, D. (2010), TRIPS after Fifteen Years: Success or Failure, as measured by Compulsory Licensing, 18 J. Intell. Prop. L. 2010, 367, Athens, GA: The University of Georgia School of Law
- Kahin, B. (2007), Patents and Diversity in Innovation, 13 Mich. Telecomm. Tech. L. Rev. 2007, 389, Ann Arbor, MI: University of Michigan Law School
- Koskenniemi, M. (1989), From Apology to Utopia: The Structure of International Legal Argument, Helsinki: Lakimiesliiton kustannus
- Lee, N. (2008), Fragmented Infringement of Computer Program Patents in the Global Economy, 48 IDEA: The Intellectual Property Law Review 2008, 345, Concord: University of New Hampshire School of Law
- Lee, N. (2013), Patentability of Medical Methods in Japan, in J. Drexl & N. Lee (Eds.), Pharmaceutical Innovation, Competition and Patent Law: A Trilateral Perspective, pp. 85-108, Cheltenham: Edward Elgar
- Lipson, H. & Kurman, M. (2010), Factory @ Home: The Emerging Economy of Personal Manufacturing, available at: https://www.ida.org/~/media/Corporate/OccasionalPapers/OP-5-2010-PersonalFabrication-v3.ashx (accessed on 15 May 2015)
- Matthijs, G., Huys, I., Van Overwalle, G., & Stoppa-Lyonnet, D. (2013), The European BRCA Patent Oppositions and Appeals: Coloring inside the Lines, 31 Nature biotechnology 2013, 704, London: Nature Publishing Group
- May, C. (2013), The Global Political Economy of Intellectual Property Rights: The New Enclosures?, Vol. 3, London: Routledge
- Mendis, D., (2013), 'The Clone Wars' Episode 1: The Rise of 3D Printing and its Implications for Intellectual Property Law Learning Lessons from the Past?, 35 EIPR 2013, 155, London: Sweet & Maxwell
- Oswald, L.J. (2014), Simplifying Multiactor Patent Infringement Cases Through Proper Application of Common Law Doctrine, 51 ABLJ 2014, 1, Philadelphia: Academy of Legal Studies in Business
- Pila, J. (2010), The Future of the Requirement for an Invention: Inherent Patentability as a Pre-and Post-Patent Determinant, in E. Arezzo & G. Ghidini (Eds.), Biotechnology and Software Patent Law: A Comparative Review on New Developments, pp. 55-90, Cheltenham: Edward Elgar
- Polk Wagner, R. (2002), (Mostly) against Exceptionalism, U. of Penn., Inst. for Law & Econ. Research Paper 02-18

- Polk Wagner, R. (2004), Of Patents and Path Dependency: A Comment on Burk and Lemley, 18 Berkeley Tech. L.J. 2004, 1341, Berkeley: UC Berkeley School of Law
- Reichman, J.H. (1996), Compliance with the TRIPS Agreement: Introduction to a Scholarly Debate, 29 Vand. J. Transnat'l L. 1996, 363, Tennessee: Vanderbilt University Law School
- Reichman, J.H. (2009), Intellectual Property in the Twenty-First Century: Will the Developing Countries Lead or Follow?, 46 Hous, L. Rev. 2009, 1115, Houston: Houston Law Review
- Schiuma, D. (2000), TRIPS and Exclusion Software 'as such' from Patentability, 31 IIC 2000, 36, Munich/Berlin: C.H. Beck/Springer
- Surden, H. (2013), Technological Cost as Law in Intellectual Property, 27 Harv. J.L. & Tech. 2013, 135, Cambridge: Harvard University School of Law
- Time staff (2014), The 25 Best Inventions of 2014, Time of 20 November 2014, available at: http://time.com/3594971/the-25-best-inventions-of-2014/ (accessed on 21 November 2014)
- Ullrich, H. (1989), The Importance of Industrial Property Law and other Legal Measures in the Promotion of Technological Innovation, 28 Industrial Property 1989, 102
- Van Damme, I. (2009), Treaty Interpretation by the WTO Appellate Body, Oxford: Oxford University Press
- Van Overwalle, G. (2009), Policy Levers tailoring Patent Law to Biotechnology: Comparing U.S. and European Approaches, 1 UC Irvine L. Rev. 2009, 435, Irvine: University of California
- Wu, D. (2013), The Use of Use for Patented Systems in a Single or Joint Infringement World, 14 Colum. Sci. & Tech. L. Rev. 2013, 514, New York, NY: Columbia Law School
- Yu, P.K. (2003), The Harmonization Game: What Basketball can Teach about Intellectual Property and International Trade, 26 Fordham Int'l L.J. 2003, 218, New York City: Fordham University School of Law
- Yu, P.K. (2009), The Objectives and Principles of the TRIPs Agreement, 46 Hous. L. Rev. 2009, 979, Houston, TX: University of Houston Law Center
- Zu Waldeck und Pyrmont, W. Prinz (2009), A Special Legislation for Genetic Inventions a Violation of Article 27 (1) TRIPS?, in W. Prinz zu Waldeck und Pyrmont, M.J. Adelman, R. Brauneis, J. Drexl & R. Nack (Eds.), Patents and Technological Progress in a Globalized World, Berlin/Heidelberg: Springer

Article 27(3)(b) TRIPS and Plant Variety Protection in Developing Countries

Christoph Antons

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Abstract In comparison with industrialised countries, agriculture in developing countries accounts for a substantial share of GDP and involves a substantial sector of small-holders and traditional agriculturalists. In view of these differences, the biotechnology clause of Article 27.3.b TRIPS with its requirement of plant variety protection either by patents or an effective *sui generis* system or a combination of the two has been controversial. However, developing countries have made surprisingly little use of the freedom to design their own systems in this field. Instead, there has been a surge in UPOV membership among developing countries and some have gone as far as introducing patent protection for plant varieties. Such countries now have to consider the same exclusions and exceptions to patenting that are normally

Prof. Dr. Christoph Antons is Professor at Deakin University, Melbourne, Affiliated Research Fellow at the Max Planck Institute for Innovation and Competition, Munich, Chief Investigator at the ARC Centre of Excellence for Creative Industries and Innovation and Senior Fellow at the Center for Development Research, University of Bonn.

C. Antons (\boxtimes)

Faculty of Business and Law, School of Law, Deakin University, Melbourne, VIC, Australia e-mail: christoph.antons@deakin.edu.au

discussed in countries with much more advanced biotechnology industries. The chapter examines the scope for the use of *orde public* considerations under Article 27.2 TRIPS, of exceptions for research and experimental purposes under Article 30 TRIPS, compulsory licensing under Article 31 TRIPS as well as the advantages of a specific breeding exemption and it briefly comments on the various *sui generis* options. While liberal interpretations of the TRIPS exceptions remain possible, the chapter concludes that the majority of developing countries will be better off in more creatively using the freedom to develop *sui generis* systems suitable for their local conditions rather than struggling to introduce TRIPS conform 'limited exceptions' to patent protection for plant varieties.

1 Introduction: The Impact of the TRIPS Agreement on Agricultural Policies in the Developing World

The WTO TRIPS Agreement has frequently been criticised in the academic literature as having been drafted largely in favour of developed countries, and as being disadvantageous to the developing world. However, although the impact of TRIPS on agricultural policies is mentioned in such studies, the TRIPS impact on pharmaceutical patents and on the availability of essential drugs in developing countries has in general attracted greater attention,² as have the financial and infrastructure problems such countries have encountered in meeting the requirements of the agreement to better enforce intellectual property rights. As a result, members of the WTO have on average not made much use of the flexibilities in the field of plant variety protection under the TRIPS Agreement.³ Among the reasons for this comparative lack of attention is the relatively marginal position of plant variety protection within mainstream intellectual property (IP) scholarship. There is simply no time for this field in the standard IP survey courses at many universities in which lecturers are struggling to fit patent, trade mark and copyright law into a single semester. The marginal position of the field in academia is mirrored in IP administration. Because of the requirement of long-term testing of new varieties, their registration and protection is mostly the responsibility of Agricultural Ministries and therefore, separated from discussions about IP policies that take place in the surroundings of patent offices and Ministries of Justice as well as Research and

¹ E.g. P. Drahos & J. Braithwaite (2002), Information Feudalism: Who Owns the Knowledge Economy?; S.K. Sell (2003), Private Power, Public Law: The Globalization of Intellectual Property Rights.

² See for example the discussion of the impact of Article 27.1 TRIPS in UNCTAD-ICTSD (2005), Resource Book on TRIPS and Development, pp. 363-367.

³ C.M. Correa (2012), TRIPS-Related Patent Flexibilities and Food Security: Options for Developing Countries, p. 3.

Technology Departments. More specifically related to TRIPS, the requirement of Article 27.3.b to protect plant varieties either via patents or via a *sui generis* system poses few problems in and is not an issue for industrialised countries, which are already offering this protection in one form or another and are, in most cases, members of the International Union for the Protection of New Varieties of Plants (UPOV).⁴

However, the significance of Article 27.3.b. is dramatically different in the developing world. Although the share of GDP of agriculture has steadily declined since the end of World War II, it is still very substantial and accounts for between 20 and 60 % of GDP in most African and Central Asian countries, in South Asian countries like Afghanistan, Pakistan and Nepal, Southeast Asian countries like Vietnam, Cambodia and Laos and in Pacific Island countries like Vanuatu, This compares to figures at or below 1 % in EU countries and the United States and 2 % in Australia. In addition, agriculture in developing countries is to a far lesser extent large-scale and commercialised than in industrialised countries. Instead, there is a substantial sector of smallholder and traditional agriculture and in many countries this sector is clearly the dominant one. In a similar way as for pharmaceuticals, intellectual property rights in agriculture are likely to lead to rising prices for agricultural input, such as fertilizers, pesticides and the seeds of new and improved varieties. They also may have an effect on long established practices such as the replanting, selling, and bartering of farm saved seeds, which may become more difficult or impossible if they impact on the newly protected rights of a plant breeder.7

The differences between developed and developing countries continue, if one looks at the percentage of the population regarded as rural, which lies below 20 % in most industrialised countries, but between 50 and 90 % in much of the developing world. Although national development plans and agricultural policies are written in capital cities, democratisation and a recent policy of decentralisation in many developing countries has transformed marginal rural populations into relatively

⁴ M. Llewelyn (2003), Which Rules in World Trade Law – Patents or Plant Variety Protection?, in T. Cottier & P.C. Mavroidis (Eds.), Intellectual Property: Trade, Competition and Sustainable Development, p. 306.

⁵ World Bank World Development Indicators: Data Indicators Agriculture, value added (% of GDP), available at: http://data.worldbank.org/indicator/NV.AGR.TOTL.ZS (accessed 24 March 2014).

⁶ C.M. Correa (2012), TRIPS-Related Patent Flexibilities and Food Security: Options for Developing Countries, p. 2.

⁷ H.M. Haugen, M.R. Muller & S.M. Narashiman (2011), Food Security and Intellectual Property Rights: Finding the Linkages, in T. Wong & G. Dutfield (Eds.), Intellectual Property and Human Development: Current Trends and Future Scenarios, pp. 103-138.

⁸ World Bank World Development Indicators: Data Indicators Rural population (% of total population), available at: http://data.worldbank.org/indicator/SP.RUR.TOTL.ZS (accessed 24 March 2014).

⁹ C. Wittayapak & P. Vandergeest (2010), The Politics of Decentralization: Natural Resource Management in Asia.

powerful voters. Politicians are eager not to alienate rural voters and to avoid a clash between urban and rural interests as the one that has been destabilising Thailand in recent years. Although many of them harbour ambitions for their country in commercialised agriculture and agricultural biotechnology, ¹⁰ such policies cannot be implemented at the risk of alienating rural masses concerned about the impact on their current farming practices.

2 The Negotiation History of Article 27.3.b TRIPS

Accordingly, the governments of developing countries have approached agricultural intellectual property rights with great caution. Although the International Union for the Protection of Plant Varieties was established as early as 1961, it had remained until 1994 largely a group of developed countries, situated mostly in Europe. The only non-European countries among its 22 members at that stage were Australia, Canada, Israel, Japan, South Africa and the United States. Article 27.3.b TRIPS, with its requirement of plant variety protection either by patents or by an effective *sui generis* system or a combination of the two, triggered a massive change in UPOV membership, which has grown to 71 since 1994. Among the new members are many of the so-called 'transitional economies' of Eastern Europe as well as developing countries in Asia, Africa and Latin America, including such heavyweights as Brazil, China and Russia. ¹¹ Other developing countries continue their cautious attitude towards UPOV membership, although many have observer status in at least one of the UPOV bodies. ¹²

The so-called 'biotechnology clause' of Article 27.3.b. covered one of the most controversial subject matters during the TRIPS negotiations, as is visible from the heavily bracketed Anell Draft of the text of 1990, which regarded as non-patentable subject matter the following:

[Any] plant or animal [including micro-organisms] [varieties] or [essentially biological] processes for the production of plants or animals; [this does not apply to microbiological processes or the products thereof]. [As regards biotechnological inventions, further limitations should be allowed under national law].¹³

As the brackets indicate, everything about this provision was controversial, except that it concerned plants and animals and processes for their production. By the time of the Brussels Draft in December 1990, this almost entirely bracketed text had been consolidated into two paragraphs representing the positions of developed

¹⁰ E.g. S. Smeltzer (2008), The Message is the Market: Selling Biotechnology and Nation in Malaysia, in J. Nevins & N.L. Peluso (Eds.), Taking Southeast Asia to Market: Commodities, Nature, and People in the Neoliberal Age, pp. 191-205.

¹¹ See www.upov.int/members/en (accessed 25 September 2014).

¹² See www.upov.int/members/en/observers.html (accessed 25 September 2014).

¹³ UNCTAD-ICTSD (2005), Resource Book on TRIPS and Development, p. 391.

and developing countries respectively. The wording favoured by developing countries still excluded:

[b) B. Plants and animals, including microorganisms, and parts thereof and processes for their production. As regards biotechnological inventions, further limitations should be allowed under national law.]

Only parts of the first sentence survived in the more restrictive final wording, excluding 'plants and animals other than micro-organisms, and essentially biological processes for the production of plants and animals other than non-biological and micro-biological processes.' The second sentence of Article 27.3.b requesting protection of plant varieties 'either by patents or by an effective *sui generis* system or by any combination thereof' was a straight adoption of the Brussels draft version preferred by developed countries. ¹⁴ Also adopted from this version was the requirement of review 4 years after the date of entry into force of the WTO Agreement. The fact that this review is now ongoing since 1999¹⁵ and extends even to the question of what should be the purpose of the review ¹⁶ shows again how controversial the entire subject matter is. ¹⁷

Options for Developing Countries Under Article 27.3.b: Patents Vis-à-Vis a *Sui Generis* Plant Variety Rights System

Although Article 27.3.b requires from developing countries the introduction of plant variety protection, it leaves considerable freedom how to implement this obligation. Countries that opt for a *sui generis* system only need to ensure that it is 'effective'. In opting for this wording, developed country members may have had the UPOV standards in mind and it is indeed widely accepted that a plant variety protection system conforming to the UPOV Convention in its 1991 version would certainly provide an effective form of protection. It is equally widely accepted, however, that there is nothing in the TRIPS Agreement or its negotiating history suggesting that UPOV would be the only option and that WTO members are therefore, free to design their own systems. ¹⁸ Indeed, it has been suggested that

¹⁴ Ibid

¹⁵D. Gervais (2008), The TRIPS Agreement: Drafting History and Analysis, pp. 361-372.

¹⁶ D.B. Barbosa & K. Grau-Kuntz (2010), Exclusions from Patentable Subject Matter and Exceptions and Limitations to the Rights: Biotechnology, WIPO SCP/15/3, p. 19, note 43.

¹⁷ On the different views in the Council for TRIPS deliberations during the review, see P. Roffe (2008), Bringing Minimum Intellectual Property Standards into Agriculture: The Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), in G. Tansey & T. Rajotte (Eds.), The Future Control of Food, pp. 63-64.

¹⁸ D. Gervais (2008), The TRIPS Agreement: Drafting History and Analysis, p. 353; UNCTAD-ICTSD (2005), Resource Book on TRIPS and Development, p. 394; M. Llewelyn (2003), Which

'effective' in this context simply means that the rights must be enforceable by administrative and/or judicial procedures ¹⁹ or that effectiveness must be judged by its ability to accommodate local and national welfare and economic goals. ²⁰

Under the circumstances, countries have the following options to implement Article 27.3.b: (a) patent protection; (b) plant variety legislation conforming to UPOV 1991; (c) any other type of *sui generis* protection (including one modelled after the 1978 version of UPOV) and/or a combination of these various options. It is hardly surprising that the strongest form of protection via patents until recently has attracted little interest among developing nations. ²¹ Prior to the TRIPS extension of patentable subject matter in Article 27.1 to all fields of technology, many developing countries excluded food and similar products from patentability.²² Observers have noted, however, a recent tendency of US American Free Trade Agreements (FTAs) to restrict the choice granted in Article 27.3.b and to oblige countries to make patents available in this field or, at least, to endeavour to do so. Correa²³ mentions the US FTAs with Chile, Peru, Colombia and the Dominican Republic-Central American FTA (CAFTA-DR) as examples for the 'best endeavour clause' and the FTA with Morocco as an example for a straightforward obligation to make patent rights available for plant varieties. Barbosa and Grau-Kuntz²⁴ and Bently²⁵ mention in addition to these agreements also the ones with Bahrain, Jordan, Oman and Singapore. Kanniah and Antons²⁶ also discuss the example of the US-Singapore FTA, which expressly eliminated the choice of Article 27.3.b, although in the

Rules in World Trade Law – Patents or Plant Variety Protection?, in T. Cottier & P.C. Mavroidis (Eds.), Intellectual Property: Trade, Competition and Sustainable Development, pp. 308-309; K. Aoki (2008), Seed Wars: Controversies and Cases on Plant Genetic Resources and Intellectual Property, p. 82, note 101; G. van Overwalle (2008), Biotechnology and Patents: Global Standards, European Approaches and National Accents, in D. Würger & T. Cottier (Eds.), Genetic Engineering and the World Trade System, p. 80.

¹⁹ H.M. Haugen, M.R. Muller & S.M. Narashiman (2011), Food Security and Intellectual Property Rights: Finding the Linkages, in T. Wong & G. Dutfield (Eds.), Intellectual Property and Human Development: Current Trends and Future Scenarios, p. 120.

²⁰ S. Ragavan & J. Mayer (2007), Has India Addressed Its Farmers Woes? A Story of Plant Protection Issues, 20 Geo. Int'l Envtl. L. Rev. 2007, 101.

²¹ D.B. Barbosa & K. Grau-Kuntz (2010), Exclusions from Patentable Subject Matter and Exceptions and Limitations to the Rights: Biotechnology, WIPO SCP/15/3, p. 39; S. Ragavan & J. Mayer (2007), Has India Addressed Its Farmers Woes? A Story of Plant Protection Issues, 20 Geo. Int'l Envtl. L. Rev. 2007, 103.

²² UNCTAD-ICTSD (2005), Resource Book on TRIPS and Development, p. 353.

²³ C.M. Correa (2012), TRIPS-Related Patent Flexibilities and Food Security: Options for Developing Countries, p. 6.

²⁴ D.B. Barbosa & K. Grau-Kuntz (2010), Exclusions from Patentable Subject Matter and Exceptions and Limitations to the Rights: Biotechnology, WIPO SCP/15/3, pp. 20-24.

²⁵ L. Bently (2011), Exclusions from Patentability and Exceptions to Patentees' Rights: Taking Exceptions Seriously, 64 CLP 2011, 334.

²⁶ R. Kanniah & C. Antons (2012), Plant Variety Protection and Traditional Agricultural Knowledge in Southeast Asia, 13 Australian J. Asian L. 2010, 3.

case of Singapore this did not require legislative changes and merely consolidated an already existing position in patent law.²⁷

Apart from TRIPS and FTAs, the partial shift towards patents in this field has also been encouraged by the 1991 revision of the UPOV Convention, which abandoned the previous prohibition of double protection under patent and plant variety laws.²⁸ In addition, the extension of patent rights differs from country to country and Correa has warned of national laws that allow parts or components of a plant to be patented, 'since control over the latter leads to control over the former.' He advises, therefore, to exclude not just plants, but also 'parts and components of plants, including genes, even if isolated'. ²⁹ An example for a legislation with wide ranging exclusion provisions is that of Brazil, excluding '...all or part of natural living beings and biological materials found in nature or isolated therefrom, including the genome or the germ plasm of any natural living being and any natural biological process,' (Article 10.IX of Law No. 9.279) Not patentable in Brazil are "...living beings, in whole or in part, except for transgenic microorganisms meeting the three requirements of patentability... and which are not mere discoveries.' (Article 18.III) Haugen, who quotes the Brazilian law as example, points out that this wide ranging exclusion has not been challenged in the WTO. 30 He also points out that the patenting of genes and the scope of relevant patents are issues that are not settled in developing countries and that TRIPS does not require from them that protection of micro-organisms must extend to organisms into which such microorganisms become incorporated.³¹

In the industrialised countries of Europe and North America, patents and plant breeders' rights co-exist. In Europe, a distinction is being made between non-patentable plant varieties and patentable plants and processes for the production of plants that are not entirely consisting of natural phenomena and are not covered by the exclusion.³² In the United States, patent protection in the plant

²⁷ W.L. Ng-Loy (2015), IP and FTAs of Singapore: Ten Years On, in C. Antons & R.M. Hilty (Eds.), Free Trade Agreements and Intellectual Property in the Asia-Pacific Region.

²⁸ C.M. Correa (2012), TRIPS-Related Patent Flexibilities and Food Security: Options for Developing Countries, p. 4; D.B. Barbosa & K. Grau-Kuntz (2010), Exclusions from Patentable Subject Matter and Exceptions and Limitations to the Rights: Biotechnology, WIPO SCP/15/3, p. 32.

²⁹ C.M. Correa (2012), TRIPS-Related Patent Flexibilities and Food Security: Options for Developing Countries, pp. 5-6; see also H.M. Haugen (2007), The Right to Food and the TRIPS Agreement: With a Particular Emphasis on Developing Countries' Measures for Food Production and Distribution, pp. 228-229.

³⁰ Ibid., p. 233, fn. 84.

³¹ Ibid., p. 230.

³² G. van Overwalle (2008), Biotechnology and Patents: Global Standards, European Approaches and National Accents, in D. Würger & T. Cottier (Eds.), Genetic Engineering and the World Trade System, pp. 89-91; N. Louwaars et al. (2009), Breeding Business: The Future of Plant Breeding in the Light of Developments in Patent Rights and Plant Breeder's Rights, pp. 15-16; P. van der Kooij (2010), Towards a Breeder's Exemption in Patent Law?, 32 EIPR 2010, 546-547.

breeding sector, which was traditionally allowed for asexually propagated species under the Plant Patent Act of 1930,³³ expanded to standard patents and biotechnology with a string of court cases starting with *Diamond v Chakrabarty* in 1980.³⁴ However, commentators are noticing a recent more restrictive trend.³⁵

4 Exclusion Under Article 27.2 TRIPS

Article 27.3.b. TRIPS means therefore, that patent protection is relevant for many developing countries, to some extent independent of the choice exercised under the provision. It is obviously relevant for those countries that are following the trend towards patent protection by not making use of the possibility of exclusion, but it is possibly also relevant for those that insufficiently limit the exclusion to plant varieties rather than making it clear that it extends also to parts and components of plants. To avoid the potentially stifling effects of the patent system on their plant breeding systems, governments in designing their patent laws therefore, may have to rely on more general exclusions, such as those under Article 27.2 or implement exceptions to the patent rights conferred in accordance with Article 30 TRIPS.

The scope which those provisions ultimately grant has been the subject of much debate. In view of very few decided disputes by WTO panels that could serve as guidance,³⁶ the views expressed range from cautiously optimistic ones that believe that there is still much flexibility in TRIPS³⁷ to more formal and literal

³³ K. Aoki (2008), Seed Wars: Controversies and Cases on Plant Genetic Resources and Intellectual Property, pp. 30-34.

³⁴ Diamond v. Chakrabarty, 447 U.S. 303 (1980).

³⁵ N. Louwaars et al. (2009), Breeding Business: The Future of Plant Breeding in the Light of Developments in Patent Rights and Plant Breeder's Rights, p. 29; P. van der Kooij (2010), Towards a Breeder's Exemption in Patent Law?, 32 EIPR 2010, 549; C.M. Correa (2012), TRIPS-Related Patent Flexibilities and Food Security: Options for Developing Countries, p. 5; M. Rimmer (2013), Patent-Busting: The Public Patent Foundation, Gene Patents and the Seed Wars, in C. Lawson & J. Sanderson (Eds.), The Intellectual Property and Food Project: From Rewarding Innovation and Creation to Feeding the World.

³⁶ R.C. Dreyfuss (2009), Fostering Dynamic Innovation, Development and Trade: Intellectual Property as a Case Study in Global Administrative Law, Acta Juridica 2009, 258-259.

³⁷ C.M. Correa (2012), TRIPS-Related Patent Flexibilities and Food Security: Options for Developing Countries; C.M. Correa (2005), The International Dimension of the Research Exception; C. Garrison (2006), Exceptions to Patent Rights in Developing Countries, UNCTAD-ICTSD Issue Paper No. 17; G. Dinwoodie & R. Dreyfuss (2007), Diversifying Without Discriminating: Complying with the Mandates of the TRIPS Agreement, 13 Mich. Telecomm. Tech. L. Rev. 2007, 445; H.M. Haugen (2007), The Right to Food and the TRIPS Agreement: With a Particular Emphasis on Developing Countries' Measures for Food Production and Distribution; H.M. Haugen (2009), Human Rights and TRIPS Exclusion and Exception Provisions, 11 J. W. Intell. Prop. 2009, 345; H.M. Haugen, M.R. Muller & S.M. Narashiman (2011), Food Security and Intellectual Property Rights: Finding the Linkages, in T. Wong & G. Dutfield (Eds.), Intellectual Property and Human Development: Current Trends and Future Scenarios.

interpretations that, sometimes with regret, predict that TRIPS and WTO panels may just not provide that much leeway. 38 This basic difference in approach becomes visible, for example, with regards to Article 27.2. Correa³⁹ believes that Article 27.2 can in limited circumstances be used to prevent the patenting of technology that may have negative effects on agricultural production or the environment. Article 27.2 allows for the exclusion from patentability of inventions 'the prevention within their territory of the commercial exploitation of which is necessary to protect *orde public* or morality, including to protect human, animal or plant life or health or to avoid serious prejudice to the environment.' The introduction of terminator genes described by Hubicki and Sherman⁴⁰ could be an example for considerations under Article 27.2.⁴¹ Van Overwalle⁴² explains that it is the 'commercial exploitation' that is targeted and not the invention as such. Hence, it could be difficult to rely on this provision, if at the same time the sale or commercial exploitation of the invention is permitted. Llewelvn⁴³ also expresses scepticism about the usefulness of Article 27.2 in this context, because of the restrictive interpretation of the equivalent provision in the European Patent Convention (Article 53a) and because 'it is unlikely that the WTO would accept a circumvention of the requirement in Article 27(3)(b) by the use of Article 27(2). Haugen, ⁴⁴ on the other hand, thinks that the scope of Article 27.2 is wider than that of Article 53a EPC and would, therefore, be relevant for excluding inventions based on 'genetic use restriction technology'. Curci⁴⁵ distinguishes between 'classical' and 'radical' approaches to the interpretation of Article 53a EPC which may be extended to Article 27.2. While the 'classical' approach 'views the patent system as autonomous and neutral on issues such as ethics and the environment which are not related to traditional patentability requirements', the 'radical' view seeks to integrate such

³⁸ K.J. Strandburg (2009), Evolving Innovation Paradigms and the Global Intellectual Property Regime, 41 Conn. L. Rev. 2009, 861-920; C. Dent (2011), The TRIPS Agreement and an Experimental Use Exception for 'Research Tools', 44 Australian Econ. Rev. 2011, 73-78.

³⁹ C.M. Correa (2012), TRIPS-Related Patent Flexibilities and Food Security: Options for Developing Countries, p. 8.

⁴⁰ S. Hubicki & B. Sherman (2005), Terminator Genes as "Technical" Protection Measures for Patents?, in C. Heath & A. Kamperman Sanders (Eds.), New Frontiers of Intellectual Property Law: IP and Cultural Heritage, Geographical Indications, Enforcement and Overprotection.

⁴¹ H.M. Haugen (2009), Human Rights and TRIPS Exclusion and Exception Provisions, 11 J. W. Intell. Prop. 2009, 349-350.

⁴² G. van Overwalle (2008), Biotechnology and Patents: Global Standards, European Approaches and National Accents, in D. Würger & T. Cottier (Eds.), Genetic Engineering and the World Trade System, p. 81.

⁴³ M. Llewelyn (2003), Which Rules in World Trade Law – Patents or Plant Variety Protection?, in T. Cottier & P.C. Mavroidis (Eds.), Intellectual Property: Trade, Competition and Sustainable Development, p. 307.

⁴⁴ H.M. Haugen (2009), Human Rights and TRIPS Exclusion and Exception Provisions, 11 J. W. Intell. Prop. 2009, 345.

⁴⁵ J. Curci (2010), The Protection of Biodiversity and Traditional Knowledge in International Law of Intellectual Property, pp. 234-235.

issues into the analysis and advocates a contextual reading of patent law that does not divorce it from other parts of the legal system. Curci suggests that the two approaches could be reconciled by establishing a Public Policy Board within patent offices to address the concerns of the 'radical approach' while 'preserving the efficiencies of the classical approach'.

That 'efficiency' however, is certainly a matter for debate⁴⁶ and it remains unclear what would be 'radical' about an approach that seeks to contextualise intellectual property law within broader public policy concerns, and that sees this field of law as embedded in the wider legal system. The discussion shows in any case, that there is more potential for the use of Article 27.2 than previously acknowledged and not only in this context.⁴⁷ Bently⁴⁸ points to serious institutional obstacles, such as limited patent office resources and the disruption of efficient international grant procedures, and concludes that the strategic advantages of exclusions vis-à-vis exceptions are overstated because patent offices fail to implement them seriously. These are serious concerns, but they may still not prevent some activist offices in developing countries in exceptional cases to delve into considerations involving the Article 27.2 exclusion.

5 Exceptions from Patentability Under Article 30 TRIPS for Research and Experimental Purposes

Somewhat less controversial than the use of ethical principles and morals under Article 27.2 would be the seeking of exceptions to the rights of a patentee under Article 30 TRIPS. Correa⁴⁹ has explained the history of the TRIPS negotiations on Article 30 and how the provision changed from the list of non-exhaustive specific exceptions in the Brussels draft, supported by the EC, Brazil and Canada, to the current general formulation modelled after Article 9.2 Berne Convention. Among the specific exceptions listed was one for 'acts done for experimental purposes', also often referred to as 'research exception', although Correa points out that the meaning of these terms is not necessarily always identical.⁵⁰ TRIPS in the end adopted the more general wording of the current Article 30 with its three-step test inspired by Article 9.2 Berne Convention, so that the discussion about exceptions in copyright law has acquired some relevance for the interpretation of Article 30.

⁴⁶ P. Drahos (2010), The Global Governance of Knowledge: Patent Offices and their Clients.

⁴⁷C. Arup (2008), The World Trade Organization Knowledge Agreements, p. 392; see also R.C. Dreyfuss (2009), Fostering Dynamic Innovation, Development and Trade: Intellectual Property as a Case Study in Global Administrative Law, Acta Juridica 2009, 252.

⁴⁸ L. Bently (2011), Exclusions from Patentability and Exceptions to Patentees' Rights: Taking Exceptions Seriously, 64 CLP 2011, 329, 338-341.

⁴⁹ C.M. Correa (2005), The International Dimension of the Research Exception, pp. 7-8.

⁵⁰ Ibid., p. 6, note 4.

Correa⁵¹ makes the important point that WTO panels provide clarifications of WTO provisions about meaning and consistency with TRIPS standards, but are not allowed to inquire into the legitimacy of particular public policy purposes. The three step-test of Article 30 has been examined by the WTO panel in the Canada – Patent Protection for Pharmaceutical Products case (WT/DS114/R, 17 March 2000), in which the panel examined the TRIPS compliance of Canada's 'Bolar exception' allowing for the use of the patented invention in testing to facilitate early marketing approval and manufacturing of generic pharmaceutical products. From a viewpoint of developing countries, it is essential that any patenting of plant or plant components does not have negative consequences for the ability of farmers to use reproductive material for plant breeding, and for scientists in public and private research institutes to work with the patented plant material. As far as the interests of scientists and public or private plant breeders are concerned, many developed country jurisdictions tend to distinguish between research on and research with plant material.⁵² While the former is covered under national laws, for example in France, Germany and Switzerland, by research exemptions, the latter is not.⁵³ Exceptions for research on patent protected material through, for example, reverse engineering, are well accepted in patent law as an essential part of the innovation process. If the experimenting is with patent protected material however, then the invention becomes a research tool and that may well be a primary use of the invention. As Strandburg⁵⁴ puts it: "Experimenting on" an invention, like any form of disclosure, has only an indirect impact, through potentially competitive follow-ons, on the market for the embodiment of the original invention. In contrast, unauthorized use of a research tool has a direct impact on the market for the tool.'

Plant breeders typically make use of patented traits and breeding methods and are thus, frequently working *with* patented plant material. Although a general exception of working with patented subject matter is possible and in fact implemented in Belgium, ⁵⁵ as experimentation/research needs only to be 'related to' a patented invention, ⁵⁶ it is argued that licensing mechanisms ⁵⁷ and/or a specific

⁵¹ Ibid., p. 8.

⁵² S.J.R. Bostyn (2013), Patentability of Plants: At the Crossroads between Monopolizing Nature and Protecting Technological Innovation?, 16 J. W. Intell. Prop. 2013, 132.

⁵³ V. Prifti (2013), The Breeding Exemption in Patent Law: Analysis of Compliance with Article 30 of the TRIPS Agreement, 16 J. W. Intell. Prop. 2013, 218-219.

⁵⁴ K.J. Strandburg (2004), What Does the Public Get? Experimental Use and the Patent Bargain, Wis. L. Rev. 2004, 122.

⁵⁵G. van Overwalle (2006), The Implementation of the Biotechnology Directive and its After-Effects: The Introduction of a New Research Exemption and a Compulsory Licence for Public Health, 37 IIC 2006, 907.

⁵⁶ C.M. Correa (2005), The International Dimension of the Research Exception, p. 23; C. Garrison (2006), Exceptions to Patent Rights in Developing Countries, UNCTAD-ICTSD Issue Paper No. 17, pp. 4-5; E. Misati & K. Adachi (2010), The Research and Experimentation Exceptions in Patent Law: Jurisdictional Variations and the WIPO Development Agenda, UNCTAD-ICTSD Policy Brief No. 7, pp. 3-6.

⁵⁷ Ibid., pp. 4, 6.

exemption for breeders would be 'more appropriate' to avoid unintended consequences for other biotechnology sectors. ⁵⁸ In developing countries, that decision may depend on the actual existence of such other biotechnology sectors. ⁵⁹ Where there is no national interest in other biotechnology industries, a more general exception for scientific research and experimental purposes, as currently available in many developing countries, ⁶⁰ may in fact be more suitable. Correa ⁶¹ advocates a broad research exception and points to the WTO panel decision in the EC–Canada case as proof that such an exception is compatible with Article 30 of TRIPS. He believes, however, that TRIPS consistency can be predicated at this stage only in cases where the research is conducted on, and not with, the patented subject matter and where it concerns only scientific, non-profit research.

Countries introducing broader exceptions are, therefore, entering far less secure territory. However, there is no reason to limit the research and experimentation exception to non-commercial objectives only. In fact, such an approach is unrealistic at a time when universities and research institutes are encouraged to patent and commercialise their knowledge and the lines between public and private research are blurred. National approaches to this issue are again widely different. In some countries, for example in Taiwan, the exception applies only to research 'with non-profit acts or intention'. In other countries, for example in Turkey and Singapore, there is no such limitation to non-commercial research. On the other hand, court decisions in the US and the Netherlands have recently interpreted the research exemption very narrowly and excluded research aimed at the development of a new commercial product.

Some analysts also see an exception extending to research *with* patented subject matter, where the invention has a primary use as research tool, as likely not in compliance with TRIPS. Dent⁶⁵ argues that such an exception would not be limited

⁵⁸ V. Prifti (2013), The Breeding Exemption in Patent Law: Analysis of Compliance with Article 30 of the TRIPS Agreement, 16 J. W. Intell. Prop. 2013, 219.

⁵⁹ Ibid., 236, note 4, mentioning the pharmaceutical, biofuel, chemical and cosmetics industry.

⁶⁰ See the overview in C.M. Correa (2005), The International Dimension of the Research Exception, pp. 34-66.

⁶¹ Ibid., p. 31.

⁶² W.R. Cornish (1998), Experimental Use of Patented Inventions in European Community States, 29 IIC 1998, 735; E. Misati & K. Adachi (2010), The Research and Experimentation Exceptions in Patent Law: Jurisdictional Variations and the WIPO Development Agenda, UNCTAD-ICTSD Policy Brief No. 7, p. 3.

⁶³ UNCTAD-ICTSD (2005), Resource Book on TRIPS and Development, p. 443.

⁶⁴ N. Louwaars et al. (2009), Breeding Business: The Future of Plant Breeding in the Light of Developments in Patent Rights and Plant Breeder's Rights, p. 17; S.J.R. Bostyn (2013), Patentability of Plants: At the Crossroads between Monopolizing Nature and Protecting Technological Innovation?, 16 J. W. Intell. Prop. 2013, 133-134. See also the list of countries in WIPO (2010), Patent Related Flexibilities in the Multilateral Legal Framework and their Legislative Implementation at the National and Regional Levels, WIPO Doc. CDIP/5/4 Rev., p. 21.

⁶⁵C. Dent (2011), The TRIPS Agreement and an Experimental Use Exception for 'Research Tools', 44 Australian Econ. Rev. 2011, 76-77.

and would also unreasonably conflict with a normal exploitation of the patent, because a significant portion of the target market of the patentee could avoid paving for a research tool. He concludes from the panel decision however, that the interests of third parties constitute a legitimate interest in the context of the third step. However, since the panel considered the parts of the test cumulatively, the legitimate interests of third parties cannot come into play, if measures do not comply with step one or two of the test. 66 Dreyfuss 67 agrees that the findings of previous panel decisions such as that in the EC-Canada case are not encouraging, particularly also because it treated the non-discrimination clause of Article 27.1 as structural, so that a broad law covering all fields of technology would be unlikely to meet the 'limited' requirement of the test. Kur⁶⁸ bemoans the paucity of reasoning and lack of policy discussion and concludes from the comparative remarks of the panel that 'exemptions of more than purely de minimis character stand a certain chance of being accepted only where it can be demonstrated that a similar rule also applies in a number of other countries.' She finds that for legislators and courts relying on the panels' narrow interpretation 'the stakes may become too high for limitation to be sustained, in particular where they venture into untested areas.' Garrison⁶⁹ sees the panel decision as 'weak precedent' because of an erroneous interpretation of 'limited' and because an 'evolutionary approach' after the Doha Declaration on TRIPS and Public Health would lead to different results. Correa⁷⁰ points out that panel reports do not create binding precedents and agrees that future panels could decide differently. Kur⁷¹ agrees, but finds it possible that a self-endorsing dynamism develops, in which the panel reports are becoming the basis for common practice in member states and as such signal agreement, making it even more important to raise alternative interpretations.

⁶⁶ H. Grosse Ruse-Khan (2011), Assessing the Need for a General Public Interest Exception in the TRIPS Agreement, in A. Kur & M. Levin (Eds.), Intellectual Property Rights in a Fair World Trade System: Proposals for Reform of TRIPS, p. 183; A. Kur (2011), Limitations and Exceptions under the Three-Step Test – How much Room to Walk the Middle Ground?, in A. Kur & M. Levin (Eds.), Intellectual Property Rights in a Fair World Trade System: Proposals for Reform of TRIPS, p. 227.

⁶⁷R.C. Dreyfuss (2009), Fostering Dynamic Innovation, Development and Trade: Intellectual Property as a Case Study in Global Administrative Law, Acta Juridica 2009, 252-255.

⁶⁸ A. Kur (2011), Limitations and Exceptions under the Three-Step Test – How much Room to Walk the Middle Ground?, in A. Kur & M. Levin (Eds.), Intellectual Property Rights in a Fair World Trade System: Proposals for Reform of TRIPS, pp. 236-237, 239.

⁶⁹ C. Garrison (2006), Exceptions to Patent Rights in Developing Countries, UNCTAD-ICTSD Issue Paper No. 17, pp. 41-42.

⁷⁰C.M. Correa (2005), The International Dimension of the Research Exception, p. 10.

⁷¹ A. Kur (2011), Limitations and Exceptions under the Three-Step Test – How much Room to Walk the Middle Ground?, in A. Kur & M. Levin (Eds.), Intellectual Property Rights in a Fair World Trade System: Proposals for Reform of TRIPS, p. 240.

An interesting view comes from Bently⁷² who distinguishes the 'typical' TRIPS patent protection case relating to pharmaceuticals in EC–Canada from cases where there is no TRIPS obligation to grant patent rights and in which case the first step of Article 30 should be allowed to operate more broadly. The reason is that the patentee is still receiving more protection than it would if the permissible exclusion was adopted. This interpretation would assist greatly in cases involving patent protection for plant varieties and in focusing on exceptions that work rather than on exclusions that do not work. Other interpretations to reclaim space and to prevent the 'foreclosure of the middle ground'⁷³ are to be found in the Declaration on a Balanced Interpretation of the Three-Step Test in Copyright Law with its focus on the comprehensive overall assessment rather than cumulative nature of the test, ⁷⁴ and in the attempts by Grosse Ruse-Khan and Kur⁷⁵ to base a revised three-step test on the proportionality principle derived from Article XX GATT.

In Kur's analysis,⁷⁶ the criteria of the first and second step are of a gradual rather than absolute nature, which means that 'normal exploitation' would be 'somewhere on a scale between full exclusivity and the grant of a market position which in spite of certain restrictions is sufficient to prevent market failure.' This would need to be measured against the interests and policies pursued. Finally, the proportionality of the measure needed to be assessed by asking whether it does not go further than what is needed to achieve the purpose. This would allow for a more liberal assessment than a mere focus on the profits of the patentee.

If one accepts the broader view, then it is possible to finally include the public interest considerations that appear in the third step, that the exception does not unreasonably prejudice the legitimate interests the patent owner, taking account of the legitimate interests of third parties. In the EC–Canada case, the panel rejected the EC's view that 'legitimate interests' was confined to legal interests. It did not reject a much wider interpretation provided by Canada, prompting Haugen, 77

⁷²L. Bently (2011), Exclusions from Patentability and Exceptions to Patentees' Rights: Taking Exceptions Seriously, 64 CLP 2011, 346-347.

⁷³ A. Kur (2011), Limitations and Exceptions under the Three-Step Test – How much Room to Walk the Middle Ground?, in A. Kur & M. Levin (Eds.), Intellectual Property Rights in a Fair World Trade System: Proposals for Reform of TRIPS, p. 238.

⁷⁴ C. Geiger, J. Griffiths & R.M. Hilty (2008), Declaration on a Balanced Interpretation of the 'Three-Step Test' in Copyright Law, 39 IIC 2008, 709.

⁷⁵ H. Grosse Ruse-Khan (2011), Assessing the Need for a General Public Interest Exception in the TRIPS Agreement, in A. Kur & M. Levin (Eds.), Intellectual Property Rights in a Fair World Trade System: Proposals for Reform of TRIPS; A. Kur (2011), Limitations and Exceptions under the Three-Step Test – How much Room to Walk the Middle Ground?, in A. Kur & M. Levin (Eds.), Intellectual Property Rights in a Fair World Trade System: Proposals for Reform of TRIPS.

⁷⁶ A. Kur (2011), Limitations and Exceptions under the Three-Step Test – How much Room to Walk the Middle Ground?, in A. Kur & M. Levin (Eds.), Intellectual Property Rights in a Fair World Trade System: Proposals for Reform of TRIPS, p. 249.

⁷⁷ H.M. Haugen (2007), The Right to Food and the TRIPS Agreement: With a Particular Emphasis on Developing Countries' Measures for Food Production and Distribution, p. 243.

Correa⁷⁸ and Prifti⁷⁹ to conclude that 'legitimate interests' included 'general societal interests', including those of farmers, plant breeders, public breeding institutions, follow-on innovators, competitors and users. Nevertheless, a comparison of the research/experimental exceptions in developing countries compiled by Correa⁸⁰ shows that many of them are still relatively restrictive and require private, non-commercial research and/or scientific research. 81 Both of these requirements seem to exclude farmers and breeders who experiment with plant material. Commentaries such as UNCTAD-ICTSD also focus on 'scientific research' and experimentation on the invention with commercial purposes. 82 While the latter wording could include farmers, many of the exceptions used in developing countries clearly do not seem to consider them as innovators. This comes from a longstanding assumption that farming knowledge is overwhelmingly 'traditional' and that farmers are merely the recipients of modern technology. Studies in anthropology and rural sociology however, have shown that this is rarely the case and that farmers are in fact highly innovative in developing varieties suited to local conditions. They have referred to what is often regarded as 'traditional knowledge' in rural areas as an admixture of local folk knowledge and extra-local scientific knowledge that could be termed 'peasant science'. 83

An excellent example is the transplant of Para rubber (*hevea brasilisensis*) by the British from Brazil to Southeast Asia. Dove⁸⁴ points out that 'what was transplanted was a plant and not a turnkey system of knowledge and production. Much of the production system in Southeast Asia was created anew, with little reference to South America.' Thus, agricultural technology is different from many other areas of industrial technology that need little more than a plug and a switch to turn it on and off. Transferred agricultural technology needs to be adapted to local soil and weather conditions and this is usually only achieved after intensive experimenting and testing, carried out both by researchers in government research institutions as well as by local farmers and breeders.

Experimental use exceptions should, therefore, be broadly worded to include farmers and breeders as well as research scientists as potential innovators. They

⁷⁸ C.M. Correa (2005), The International Dimension of the Research Exception, p. 16.

⁷⁹ V. Prifti (2013), The Breeding Exemption in Patent Law: Analysis of Compliance with Article 30 of the TRIPS Agreement, 16 J. W. Intell. Prop. 2013, 225.

⁸⁰ C.M. Correa (2005), The International Dimension of the Research Exception, pp. 34-66.

⁸¹ See for example the provisions in Albania, Argentina, Bahrain, Bolivia, Kazakhstan, Nicaragua and others. See also the countries listed in WIPO (2010), Patent Related Flexibilities in the Multilateral Legal Framework and their Legislative Implementation at the National and Regional Levels, WIPO Doc. CDIP/5/4 Rev., p. 21.

⁸² UNCTAD-ICTSD (2005), Resource Book on TRIPS and Development, p. 437.

⁸³ M.R. Dove (2000), The Life-Cycle of Indigenous Knowledge, and the Case of Natural Rubber Production, in R. Ellen, P. Parkes & A. Bicker (Eds.), Indigenous Environmental Knowledge and its Transformations: Critical Anthropological Perspectives, p. 215.

⁸⁴ M.R. Dove (2012), The Banana Tree at the Gate: A History of Marginal Peoples and Global Markets in Borneo, p. 201.

should simply refer to 'acts done for experimental purposes', which could include all of these interests (as for example in Belize, Bhutan, Botswana, Cambodia and others). Alternatively, where 'scientific research' is mentioned, an exemption for experimental purposes should be added. 'Private, non-commercial use' can be a further alternative, but the non-commercial use should not become a general condition for all types of experimental purposes.

However, such a broad exception may nevertheless not survive the three-step test, not even in the re-interpretation provided by Kur, ⁸⁵ because a relatively broad experimental use exception may not be the least intrusive manner to achieve the objectives of keeping plant material in the public domain for further experimenting. If one follows Correa ⁸⁶ in what can safely be implemented without running into TRIPS problems, then the exception remains focused on scientific research *on* (and not *with*) the patented subject matter for non-commercial purposes. ⁸⁷ While such an exception would be of only limited help to famers and commercial breeders, it could possibly assist public breeding programs that are still important in many developing countries. However, here, too, the restriction not to do research *with* the patented subject matter would leave very little of the experimentation exception in the specific context of plant breeding.

6 Compulsory Licensing in Favour of Plant Breeders

Analysts who are sceptical about the TRIPS compliance of broad research and experimentation exemptions instead recommend statutory or compulsory licensing mechanisms. The statutory licensing option for public, non-commercial users, modelled after the copyright system was considered, but ultimately discarded by the Advisory Council on Intellectual Property (ACIP) in Australia, as 'it would only be a partial solution, be very complex to establish and also could carry too great a risk of failure.' Problems identified included the difficulties in determining what constitutes public non-commercial research, the difficulties in policing the system and the initial problems and costs of establishing collecting societies. ⁸⁹

⁸⁵ A. Kur (2011), Limitations and Exceptions under the Three-Step Test – How much Room to Walk the Middle Ground?, in A. Kur & M. Levin (Eds.), Intellectual Property Rights in a Fair World Trade System: Proposals for Reform of TRIPS.

⁸⁶C.M. Correa (2005), The International Dimension of the Research Exception.

⁸⁷ See also P. van der Kooij (2010), Towards a Breeder's Exemption in Patent Law?, 32 EIPR 2010, 549.

⁸⁸ C. Dent (2011), The TRIPS Agreement and an Experimental Use Exception for 'Research Tools', 44 Australian Econ. Rev. 77; K.J. Strandburg (2004), What Does the Public Get? Experimental Use and the Patent Bargain, Wis. L. Rev. 2004, 138-146.

⁸⁹ C. Dent et al. (2006), Research Use of Patented Knowledge: A Review, STI Working Paper 2006/2, pp. 38-39.

Article 12 of the European Directive on the Protection of Biotechnological Inventions provides for a compulsory cross-licensing scheme to deal with the overlap of patents and plant breeders rights under which both patent owner and plant breeder can obtain a compulsory licence after unsuccessful attempts to obtain a contractual licence, provided that the applicant can demonstrate 'a significant technical progress of considerable economic interest.' Article 36a of the Swiss Patents Act is a similarly worded provision in favour of the plant breeder. Correa⁹⁰ uses these examples to point to the often problematic nature of the comparison of very different subject matter that must be made to conclude whether there is 'significant technical progress', as a plant variety cannot represent 'significant technical progress' with regards to a patented gene. Van der Kooij has similar reasons to explain the impracticality in most cases of contractual licences and the cross-licensing mechanism foreseen in Article 12(1) of the EU Directive on Biotechnological Inventions. 91 Grosse Ruse-Khan 92 is equally sceptical about compulsory licensing, pointing to the very limited uptake of the WTO General Council waiver decision of 2003 and to the limitations of Article 31 TRIPS as a policy tool that applies only in specific cases where all the procedural requirements of Article 31 must be met. Still, there has recently been a resurgence of the use of compulsory licences in the health sector. A similarly liberal use of this instrument is likely, if developing countries have to adapt to yet another socially and economically problematic aspect of the patent system in the form of patent protection for plant varieties. It is likely that compulsory licensing would become particularly relevant in national emergencies, such as crop failure because of genetic erosion. This is an acute problem in many developing countries that have introduced the high yielding varieties of the Green Revolution and are now under great pressure to maintain agro-biodiversity, and to find solutions against increasingly invasive pests in very short time frames. 93

 90 C.M. Correa (2012), TRIPS-Related Patent Flexibilities and Food Security: Options for Developing Countries, p. 15.

⁹¹ Directive 98/44/EC of the European Parliament and of the Council of 6 July 1998 on the legal protection of biotechnological inventions; P. van der Kooij (2010), Towards a Breeder's Exemption in Patent Law?, 32 EIPR 2010, 547-548.

⁹² H. Grosse Ruse-Khan (2011), Assessing the Need for a General Public Interest Exception in the TRIPS Agreement, in A. Kur & M. Levin (Eds.), Intellectual Property Rights in a Fair World Trade System: Proposals for Reform of TRIPS, p. 184.

⁹³ J.J. Fox (2014), Fast Breeding Insect is Devastating Java's Rice – Thanks to Pesticides, Jakarta Globe of 7 March 2014.

7 A Specific Breeding Exemption

The difficulties with the interpretation of what is a 'limited exception' that does not 'unreasonably conflict with the normal exploitation of the patent', discussed for the experimental exception, could be avoided with the introduction of a specific exemption for plant breeders that may be easier to defend under Article 30 TRIPS, than a relatively broad research and experimentation exception. This specific breeding exemption has recently become a matter of great interest in industrialised countries, as for example, in various EU member states, where patent rights and plant variety protection rights have come into conflict, and reports indicate that a breeders' exemption within patent laws is necessary. 94 Different from the experimental exception, a specific breeding exemption would not have problems to pass the hurdle of the 'limited exception' test of Article 30, because its boundaries are specifically set by the breeding purposes. 95 While the specific nature of the exception helps to overcome the first test, it could create problems with the non-discrimination clause of Article 27.1 regarding the field of technology. However, in this case the differentiation is justified because TRIPS itself provides for the plant breeding exclusion in Article 27.3.b. 96 Prifti examines the breeding exemption as introduced in Germany, France and Switzerland in light of the three-step test of Article 30 and comes to the conclusion that a limited exemption that allows breeders to use patented material only for breeding purposes, but not for commercialization, would pass the test. 97 She finds a comprehensive exemption, allowing breeding as well as commercialisation much more difficult to justify, because it would erode basic principles of patent law. Nevertheless, '[t]he objectives and principles of TRIPS, however, leave considerable room for states to promote public interest in plant breeding. Special circumstances, such as food crisis, may induce states to resort to general principles instead of applying strict rules. '98

A breeding exemption would transfer the Farmers Privilege of re-using farm saved seed as regulated in plant variety systems and in UPOV into the patent system. ⁹⁹ Bostyn ¹⁰⁰ finds this a potentially risky transfer as the underlying rationale

⁹⁴ N. Louwaars et al. (2009), Breeding Business: The Future of Plant Breeding in the Light of Developments in Patent Rights and Plant Breeder's Rights, p. 53; P. van der Kooij (2010), Towards a Breeder's Exemption in Patent Law?, 32 EIPR 2010, 545.

⁹⁵ V. Prifti (2013), The Breeding Exemption in Patent Law: Analysis of Compliance with Article 30 of the TRIPS Agreement, 16 J. W. Intell. Prop. 2013, 222.

⁹⁶ Ibid., 226; L. Bently (2011), Exclusions from Patentability and Exceptions to Patentees' Rights: Taking Exceptions Seriously, 64 CLP 2011, 343.

⁹⁷ See also P. van der Kooij (2010), Towards a Breeder's Exemption in Patent Law?, 32 EIPR 2010, 552.

⁹⁸ V. Prifti (2013), The Breeding Exemption in Patent Law: Analysis of Compliance with Article 30 of the TRIPS Agreement, 16 J. W. Intell. Prop. 2013, 235.

⁹⁹ P. van der Kooij (2010), Towards a Breeder's Exemption in Patent Law?, 32 EIPR 2010, 545. ¹⁰⁰ S.J.R. Bostyn (2013), Patentability of Plants: At the Crossroads between Monopolizing Nature and Protecting Technological Innovation?, 16 J. W. Intell. Prop. 2013, 132.

of the systems is quite different. A comprehensive exemption was recently under discussion in the Netherlands, but ultimately only a limited exemption as that available in Germany, France and Switzerland, was adopted. Much of the discussion focused however, on the European Biotechnology Directive and the situation in Europe and these considerations are not relevant for developing countries. Van der Kooij suggests also that a breeding exemption could be combined with a time lock that provides the patent holder with an initial lead time in exploiting the invention. Regarding the scope of a breeding exemption, much depends therefore, again on whether one feels constrained by the WTO panel decision on Article 30 in the EC–Canada dispute, or considers the TRIPS objectives and principles as suggested above.

8 The Broad Range of Sui Generis Options

The options available to countries that decide to remain outside of the patent system and to exclude the patenting option in an effective manner range from legislation compliant with UPOV 1991, to *sui generis* plant variety laws modelled either after the less restrictive UPOV 1978, or constructed in a completely independent manner. These *sui generis* laws are largely outside of the scope of this chapter on the effects of the TRIPS Agreement. It should be noted however, that the considerable freedom countries enjoy in designing their own laws has been relatively little used. Many countries opted for UPOV conforming laws and included some modifications for traditional agricultural knowledge. The reasons for this conformity may be a lack of alternative models, the concern of introducing laws that will definitely be regarded as TRIPS compliant, as well as a basic interest to keep the options for UPOV membership open at some stage in the future. In addition, compliance with UPOV standards has also been a requirement in the Economic Partnership Agreements that developing countries have recently concluded with Japan and the European Union. Total

¹⁰¹ C.G. Trojan (2012), Problem-solving Approaches to the Issue of the Overlap between Patent Law and Breeders' Rights in the Plant Breeding Sector.

¹⁰² P. van der Kooij (2010), Towards a Breeder's Exemption in Patent Law?, 32 EIPR 2010, 550. ¹⁰³ For a detailed discussion see D. Leskien & M. Flitner (1997), Intellectual Property Rights and Plant Genetic Resources: Options for a Sui Generis System, IPGRI Issues in Genetic Resources No. 6; C.M. Correa (2000), Options for the Implementation of Farmers' Rights at the National Level, S. Ctr. Working Paper No. 8.

¹⁰⁴ C.M. Correa (2012), TRIPS-Related Patent Flexibilities and Food Security: Options for Developing Countries, p. 3.

¹⁰⁵ R. Kanniah & C. Antons (2012), Plant Variety Protection and Traditional Agricultural Knowledge in Southeast Asia, 13 Australian J. Asian L. 2012, 12-13; E.O. Awuku (2008), Intellectual Property Rights, Biotechnology and Development: African Perspectives, in D. Würger & T. Cottier (Eds.), Genetic Engineering and the World Trade System, p. 115; T. Jaeger (2015), The EU Approach to IP Protection in Partnership Agreements, in C. Antons & R.M. Hilty (Eds.), Intellectual Property and Free Trade Agreements in the Asia-Pacific Region.

It is important to mention in this context also the various equitable compensation and participation schemes recognised as Farmers' Rights in the International Treaty on Plant Genetic Resources for Food and Agriculture. Assessment of the success of such schemes has been somewhat mixed. Andersen and Winge have collected success stories and India's Protection of Plant Variety and Farmers' Rights Act is often seen as a prime example. At the state centred nature of such laws and the relatively limited role of local communities has also been seen as problematic. Harmers rights and the benefit sharing schemes foreseen for traditional knowledge holders in the Convention on Biological Diversity are examples of the paradigm shift in development studies and policies from 'top down' to 'bottom up' approaches and towards decentralisation of administrative decision-making and community-based natural resource management. From an economic and legal perspective, this paradigm shift coincides with a renewed interest in the 'knowledge commons'. However, comparative research on decentralisation policies in Asian developing countries distinguishes between mere administrative and democratic

¹⁰⁶C. Antons (2010), Sui Generis Protection for Plant Varieties and Traditional Knowledge in Biodiversity and Agriculture: The International Framework and National Approaches in the Philippines and India, 6 Ind. J.L. Tech. 2010, 95, 103; B. Tobin (2013), Open Access Seeds and Breeds: The Role of the Commons in Protecting Farmers' and Livestock Keeper's Rights and Food Security, in C. Lawson & J. Sanderson (Eds.), The Intellectual Property and Food Project: From Rewarding Innovation and Creation to Feeding the World, pp. 86-90.

¹⁰⁷ R. Andersen & T. Winge (2013), Realising Farmers' Rights to Crop Genetic Resources: Success Stories and Best Practices.

¹⁰⁸ T. Winge, R. Andersen & A. Ramanna Pathak (2013), Combining Farmers' Rights and Plant Variety Protection in Indian Law, in R. Andersen & T. Winge (Eds.), Realising Farmers' Rights to Crop Genetic Resources: Success Stories and Best Practices; S. Ragavan & J. Mayer (2007), Has India Addressed Its Farmers Woes? A Story of Plant Protection Issues, 20 Geo. Int'l Envtl. L. Rev. 2007, 97.

¹⁰⁹ R. Sagar (2005), Intellectual Property, Benefit-Sharing and Traditional Knowledge: How Effective is the Indian Biological Diversity Act, 2002?, 8 J. W. Intell. Prop. 2005, 383; N.S. Gopalakrishnan (2002), Protection of Traditional Knowledge: The Need for a Sui Generis Law in India, 5 J. W. Intell. Prop. 2002, 725; C. Antons (2007), Sui Generis Protection for Plant Varieties and Traditional Agricultural Knowledge: The Example of India, 29 EIPR 2007, 480; C. Antons (2010), Sui Generis Protection for Plant Varieties and Traditional Knowledge in Biodiversity and Agriculture: The International Framework and National Approaches in the Philippines and India, 6 Ind. J.L. Tech. 2010, 89; B. Tobin (2013), Open Access Seeds and Breeds: The Role of the Commons in Protecting Farmers' and Livestock Keeper's Rights and Food Security, in C. Lawson & J. Sanderson (Eds.), The Intellectual Property and Food Project: From Rewarding Innovation and Creation to Feeding the World; R. Kanniah & C. Antons (2012), Plant Variety Protection and Traditional Agricultural Knowledge in Southeast Asia, 13 Australian J. Asian L. 2012, 1.

¹¹⁰ See the contributions in J.P. Brosius, A. Lowenhaupt Tsing & C. Zerner (2005), Communities and Conservation: Histories and Politics of Community-Based Natural Resource Management; C. Wittayapak & P. Vandergeest (2010), The Politics of Decentralization: Natural Resource Management in Asia.

¹¹¹ E. Ostrom & C. Hess (2007), A Framework for Analyzing the Knowledge Commons, in C. Hess & E. Ostrom (Eds.), Understanding Knowledge as a Commons: From Theory to Practice.

decentralisation and it is pointed out that decentralisation without empowerment of local communities can be just another form of centralisation and consolidation of state power. ¹¹² In the context of the patenting of agricultural innovation and farmers rights, a particularly important question is whether the farmers' privilege of re-using farm saved seed can be transferred to patent law. As Helfer and Austin point out, ¹¹³ this approach has been chosen in Article 11(1) of the EU Biotechnology Directive, which transfers the farmers' privilege provided in Council Regulation (EC) No. 2100/94 of 27 July 1994 on Community Plant Variety Rights into the field of patent law. ¹¹⁴ However, its compatibility with Article 30 TRIPS has promptly been questioned. ¹¹⁵

9 Conclusion: How to Avoid the Patent Trap

The impact on developing countries of Article 27.3.b. TRIPS with its choice to introduce patent or *sui generis* protection for plant varieties has been quite dramatic. Although the provision actually grants considerable freedom to national governments to design plant variety protection systems in accordance with their agricultural policies and local needs, this freedom has not really been used. Membership in the UPOV Convention in its version of 1991 with its relatively restrictive conditions for re-using farm saved seed, and extension of the protection to essentially derived varieties, has almost tripled. Most of the new members are developing countries and countries in transition. There are various reasons why countries opt for such relatively high standards, if they are not really required under TRIPS. A major reason may be that governments want to ensure that the new system will be regarded as TRIPS compliant. More recently however, UPOV membership and/or compliance with UPOV standards have often been requirements in bilateral Free Trade Agreements (FTAs) and Economic Partnership Agreements (EPAs).

While these trends still concern the relatively benign rules of the plant variety protection system, US FTAs with several developing countries have gone further and required the elimination of the choice of Article 27.3.b. and the protection of plant varieties via patents or, at least, best endeavours to introduce such a protection. This is a development of great concern, in particular regarding the availability of plant genetic resources for follow-on innovators and farmers, as many of the

¹¹² P. Vandergeest & C. Wittayapak (2010), Decentralization and Politics, in C. Wittayapak & P. Vandergeest (Eds.), The Politics of Decentralization: Natural Resource Management in Asia.

¹¹³ L.R. Helfer & G.W. Austin (2011), Human Rights and Intellectual Property: Mapping the Global Interface, p. 388.

¹¹⁴ See also C.M. Correa (2012), TRIPS-Related Patent Flexibilities and Food Security: Options for Developing Countries, p. 13.

¹¹⁵ L.R. Helfer & G.W. Austin (2011), Human Rights and Intellectual Property: Mapping the Global Interface, p. 388, quoting J. Watal (2000), Intellectual Property Rights in the WTO and Developing Countries.

traditional defences for uses of the material are no longer available under the patent system. At first sight, it is difficult to understand why countries take such a major step, if there are so many other options available. If one takes a closer look at some of the countries involved however, it becomes clear that not all developing countries share the same interest in this subject matter in the way they would in the availability of cheap medicines. Singapore for example, whose developing country status is doubtful in any case, is a city state and food importer with no interest in agriculture, but a very keen interest in becoming a regional high technology hub attractive to foreign researchers and multinational companies. Similar considerations may apply in the Gulf Emirates, Bahrain and Oman. Chile on the other hand, is a major agricultural exporter with large-scale commercialised agriculture not dissimilar to that of countries like Australia. Enthusiasm about either the UPOV system or patents is much more difficult to find in the densely populated countries of Asia and Africa, where in particular the larger economies have ambitions for biotechnology and commercialised agriculture, but have also to take the interests of the large smallholder sector into account. Here, the majority of countries have opted for *sui generis* plant variety protection, and UPOV membership is still quite rare.

The increasing role of patents in plant breeding now requires the more adventurous developing countries to consider exclusions and exceptions that are normally discussed in countries with much more advanced biotechnology industries and much more commercialised and large scale agricultural systems. Such countries allow protection either via patents and plant variety rights or, as in the European Union, the patenting of biotechnologically enhanced plant material, while otherwise giving preference to the plant variety protection system. Nevertheless, the overlap between the two systems is creating sufficiently many problems, so that a breeders' exemption has been introduced in several countries, which transfers the farmers' privilege of reusing farm saved seed to the patent system, but allows only for the use of the patented material for breeding but not for commercialisation.

Such an exemption could also be considered in developing countries. A research and experimentation exception that recognises the innovative capacity of farmers in working with plant material would be another option. Both options may be difficult in the current climate however, if they aim at commercialisation. A research exception could also encounter difficulties under the three-step test, if it would allow for the use of plant material as research tool. This leaves compulsory licensing, in particular in food crisis situations and in emergencies such as crop failure. In extreme cases, the exclusion provision of Article 27.2 could also be used. Nevertheless, all of this leaves much insecurity, which developing countries may want to avoid by opting for the safer, but stricter interpretation of the TRIPS requirements. This may not be such a problem for some of the wealthier, food importing countries that have joined the patent system in the wake of their FTAs. For the majority of developing countries however, particularly those with large smallholder agriculture and biodiversity concerns, the patent system should simply not be an option and they are better off in creatively using the considerable freedom granted by Article 27.3.b. to develop sui generis plant variety systems suitable for their economies and local conditions.

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References

- Andersen, R. & Winge, T. (2013), Realising Farmers' Rights to Crop Genetic Resources: Success Stories and Best Practices, Abingdon (UK): Routledge
- Antons, C. (2007), Sui Generis Protection for Plant Varieties and Traditional Agricultural Knowledge: The Example of India, 29 EIPR 2007, 480, London: Sweet & Maxwell
- Antons, C. (2010), Sui Generis Protection for Plant Varieties and Traditional Knowledge in Biodiversity and Agriculture: The International Framework and National Approaches in the Philippines and India, 6 Ind. J.L. Tech. 2010, 89, Bangalore: National Law School of India University
- Aoki, K. (2008), Seed Wars: Controversies and Cases on Plant Genetic Resources and Intellectual Property, Durham, North Carolina: Carolina Academic Press
- Arup, C. (2008), The World Trade Organization Knowledge Agreements, 2nd ed., Cambridge: Cambridge University Press
- Awuku, E.O. (2008), Intellectual Property Rights, Biotechnology and Development: African Perspectives, in D. Würger & T. Cottier (Eds.), Genetic Engineering and the World Trade System, pp. 109-117, Cambridge: Cambridge University Press
- Barbosa, D.B. & Grau-Kuntz, K. (2010), Exclusions from Patentable Subject Matter and Exceptions and Limitations to the Rights: Biotechnology, WIPO SCP/15/3, available at: http://www.wipo.int/edocs/mdocs/scp/en/scp_15/scp_15_3-annex3.pdf (accessed 24 March 2015)
- Bently, L. (2011), Exclusions from Patentability and Exceptions to Patentees' Rights: Taking Exceptions Seriously, 64 CLP 2011, 315, Oxford: Oxford University Press
- Bostyn, S.J.R. (2013), Patentability of Plants: At the Crossroads between Monopolizing Nature and Protecting Technological Innovation?, 16 J. W. Intell. Prop. 2013, 105, Malden: John Wiley & Sons
- Brosius, J.P., Lowenhaupt Tsing, A. & Zerner, C. (2005), Communities and Conservation: Histories and Politics of Community-Based Natural Resource Management, Lanham, MD/Plymouth, UK: Altamira Press
- Cornish, W.R. (1998), Experimental Use of Patented Inventions in European Community States, 29 IIC 1998, 735, Munich/Berlin: C.H. Beck/Springer
- Correa, C.M. (2000), Options for the Implementation of Farmers' Rights at the National Level, S. Ctr., T.R.A.D.E., Working Paper No. 8
- Correa, C.M. (2005), The International Dimension of the Research Exception, Washington, DC: SIPPI Project, AAAS, available at: http://sippi.aaas.org/intlexemptionpaper.shtml (accessed 24 March 2015)
- Correa, C.M. (2012), TRIPS-Related Patent Flexibilities and Food Security: Options for Developing Countries, Geneva: Quaker United Nations Office (QUNO) and International Centre for Trade and Sustainable Development (ICTSD)
- Curci, J. (2010), The Protection of Biodiversity and Traditional Knowledge in International Law of Intellectual Property, Cambridge: Cambridge University Press
- Dent, C. (2011), The TRIPS Agreement and an Experimental Use Exception for 'Research Tools', 44 Australian Econ. Rev. 2011, 73, Malden: John Wiley & Sons
- Dent, C. et al. (2006), Research Use of Patented Knowledge: A Review, STI Working Paper 2006/ 2, Paris: OECD Directorate for Science, Technology and Industry
- Dinwoodie, G. & Dreyfuss, R. (2007), Diversifying Without Discriminating: Complying with the Mandates of the TRIPS Agreement, 13 Mich. Telecomm. Tech. L. Rev. 2007, 445, Ann Arbor, MI: University of Michigan Law School

Dove, M.R. (2000), The Life-Cycle of Indigenous Knowledge, and the Case of Natural Rubber Production, in R. Ellen, P. Parkes & A. Bicker (Eds.), Indigenous Environmental Knowledge and its Transformations: Critical Anthropological Perspectives, pp. 213-248, London: Routledge

- Dove, M.R. (2012), The Banana Tree at the Gate: A History of Marginal Peoples and Global Markets in Borneo, Singapore: NUS Press
- Drahos, P. & Braithwaite, J. (2002), Information Feudalism: Who Owns the Knowledge Economy?, London: Earthscan
- Drahos, P. (2010), The Global Governance of Knowledge: Patent Offices and their Clients, Cambridge: Cambridge University Press
- Dreyfuss, R.C. (2009), Fostering Dynamic Innovation, Development and Trade: Intellectual Property as a Case Study in Global Administrative Law, Acta Juridica 2009, 237, Claremont: Juta Law
- Fox, J.J. (2014), Fast Breeding Insect is Devastating Java's Rice Thanks to Pesticides, Jakarta Globe of 7 March 2014
- Garrison, C. (2006), Exceptions to Patent Rights in Developing Countries, Geneva: UNCTAD-ICTSD Issue Paper No. 17
- Geiger, C., Griffiths, J. & Hilty R.M. (2008), Declaration on a Balanced Interpretation of the 'Three-Step test' in Copyright Law, 39 IIC 2008, 707, Munich/Berlin: C.H. Beck/Springer
- Gervais, D. (2008), The TRIPS Agreement: Drafting History and Analysis, 3rd ed., London: Thomson Reuters
- Gopalakrishnan, N.S. (2002), Protection of Traditional Knowledge: The Need for a Sui Generis Law in India, 5 J. W. Intell. Prop. 2002, 725, Malden: John Wiley & Sons
- Grosse Ruse-Khan, H. (2011), Assessing the Need for a General Public Interest Exception in the TRIPS Agreement, in A. Kur & M. Levin (Eds.), Intellectual Property Rights in a Fair World Trade System: Proposals for Reform of TRIPS, pp. 167-207, Cheltenham: Edward Elgar
- Haugen, H.M. (2007), The Right to Food and the TRIPS Agreement: With a Particular Emphasis on Developing Countries' Measures for Food Production and Distribution, Leiden: Martinus Nijhoff Publishers
- Haugen, H.M. (2009), Human Rights and TRIPS Exclusion and Exception Provisions, 11 J. W. Intell. Prop. 2009, 345, Malden: John Wiley & Sons
- Haugen, H.M., Muller M.R. & Narashiman S.M. (2011), Food Security and Intellectual Property Rights: Finding the Linkages, in T. Wong & G. Dutfield (Eds.), Intellectual Property and Human Development: Current Trends and Future Scenarios, pp. 103-138, Cambridge: Cambridge University Press
- Helfer, L.R. & Austin, G.W. (2011), Human Rights and Intellectual Property: Mapping the Global Interface, Cambridge: Cambridge University Press
- Hubicki, S. & Sherman, B. (2005), Terminator Genes as "Technical" Protection Measures for Patents?, in C. Heath & A. Kamperman Sanders (Eds.), New Frontiers of Intellectual Property Law: IP and Cultural Heritage, Geographical Indications, Enforcement and Overprotection, pp. 267-289, Oxford/Portland, Oregon: Hart Publishing
- Jaeger, T. (2015), The EU Approach to IP Protection in Partnership Agreements, in C. Antons & R.M. Hilty (Eds.), Intellectual Property and Free Trade Agreements in the Asia-Pacific Region, pp. 171-210, Berlin/Heidelberg: Springer
- Kanniah, R. & Antons, C. (2012), Plant Variety Protection and Traditional Agricultural Knowledge in Southeast Asia, 13 Australian J. Asian L. 2012, 1, Annandale, NSW: The Federation Press
- Kur, A. (2011), Limitations and Exceptions under the Three-Step Test How much Room to Walk the Middle Ground?, in A. Kur & M. Levin (Eds.), Intellectual Property Rights in a Fair World Trade System: Proposals for Reform of TRIPS, pp. 208-261, Cheltenham: Edward Elgar
- Leskien, D. & Flitner, M. (1997), Intellectual Property Rights and Plant Genetic Resources: Options for a Sui Generis System, IPGRI, Issues in Genetic Resources No. 6

- Llewelyn, M. (2003), Which Rules in World Trade Law Patents or Plant Variety Protection?, in T. Cottier & P.C. Mavroidis (Eds.), Intellectual Property: Trade, Competition and Sustainable Development, pp. 303-339, Ann Arbor: The University of Michigan Press
- Louwaars, N. et al. (2009), Breeding Business: The Future of Plant Breeding in the Light of Developments in Patent Rights and Plant Breeder's Rights, Wageningen: Centre for Genetic Resources
- Misati, E. & Adachi, K. (2010), The Research and Experimentation Exceptions in Patent Law: Jurisdictional Variations and the WIPO Development Agenda, Geneva, UNCTAD-ICTSD, Policy Brief Number 7, March 2010
- Ng-Loy, W.L. (2015), IP and FTAs of Singapore: Ten Years On, in C. Antons & R.M. Hilty (Eds.), Free Trade Agreements and Intellectual Property in the Asia-Pacific Region, pp. 337-353, Heidelberg/Berlin: Springer
- Ostrom, E. & Hess, C. (2007), A Framework for Analyzing the Knowledge Commons, in C. Hess & E. Ostrom (Eds.), Understanding Knowledge as a Commons: From Theory to Practice, pp. 41-81, Cambridge, Mass./London: The MIT Press
- Prifti, V. (2013), The Breeding Exemption in Patent Law: Analysis of Compliance with Article 30 of the TRIPS Agreement, 16 J. W. Intell. Prop. 2013, 218, Malden: John Wiley & Sons
- Ragavan, S. & Mayer, J. (2007), Has India Addressed Its Farmers Woes? A Story of Plant Protection Issues, 20 Geo. Int'l Envtl. L. Rev. 2007, 97, Washington D.C.: Georgetown University Law Center
- Rimmer, M. (2013), Patent-Busting: The Public Patent Foundation, Gene Patents and the Seed Wars, in C. Lawson & J. Sanderson (Eds.), The Intellectual Property and Food Project: From Rewarding Innovation and Creation to Feeding the World, pp. 201-249. Farnham, Surrey/Burlington, VT: Ashgate
- Roffe, P. (2008), Bringing Minimum Intellectual Property Standards into Agriculture: The Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), in G. Tansey & T. Rajotte (Eds.), The Future Control of Food, pp. 48-68, London: Earthscan
- Sagar, R. (2005), Intellectual Property, Benefit-Sharing and Traditional Knowledge: How Effective is the Indian Biological Diversity Act, 2002?, 8 J. W. Intell. Prop. 2005, 383, Malden: John Wiley & Sons
- Sell, S.K. (2003), Private Power, Public Law: The Globalization of Intellectual Property Rights, Cambridge: Cambridge University Press
- Smeltzer, S. (2008), The Message is the Market: Selling Biotechnology and Nation in Malaysia, in J. Nevins & N.L. Peluso (Eds.), Taking Southeast Asia to Market: Commodities, Nature, and People in the Neoliberal Age, pp. 191-205, Ithaca/London: Cornell University Press
- Strandburg, K.J. (2004), What does the Public get? Experimental Use and the Patent Bargain, Wis. L. Rev. 2004, 81, Madison: University of Wisconsin Law School
- Strandburg, K.J. (2009), Evolving Innovation Paradigms and the Global Intellectual Property Regime, 41 Conn. L. Rev. 2009, 861, Hartford: University of Connecticut School of Law
- Tobin, B. (2013), Open Access Seeds and Breeds: The Role of the Commons in Protecting Farmers' and Livestock Keeper's Rights and Food Security, in C. Lawson & J. Sanderson (Eds.), The Intellectual Property and Food Project: From Rewarding Innovation and Creation to Feeding the World, pp. 75-100. Farnham, Surrey/Burlington, VT: Ashgate
- Trojan, C.G. (2012), Problem-solving Approaches to the Issue of the Overlap between Patent Law and Breeders' Rights in the Plant Breeding Sector. Report submitted to the Dutch Ministry of Economic Affairs, Agriculture and Innovation, available at the website of the International Association of Horticultural Producers, http://www.aiph.org/site/index.cfm?act=download.mod&doc...trojan (accessed 30 September 2014)
- UNCTAD-ICTSD (2005), Resource Book on TRIPS and Development, Cambridge University Press
- Vandergeest, P. & Wittayapak, C. (2010), Decentralization and Politics, in C. Wittayapak & P. Vandergeest (Eds.), The Politics of Decentralization: Natural Resource Management in Asia, pp. 1-20, Chiang Mai: Mekong Press

Van der Kooij, P. (2010), Towards a Breeder's Exemption in Patent Law?, 32 EIPR 2010, 545, London: Sweet & Maxwell

- Van Overwalle, G. (2006), The Implementation of the Biotechnology Directive and its After-Effects: The Introduction of a New Research Exemption and a Compulsory Licence for Public Health, 37 IIC 2006, 889, Munich/Berlin: C.H. Beck/Springer
- Van Overwalle, G. (2008), Biotechnology and Patents: Global Standards, European Approaches and National Accents, in D. Würger & T. Cottier (Eds.), Genetic Engineering and the World Trade System, pp. 77-108, Cambridge: Cambridge University Press
- Watal, J. (2000), Intellectual Property Rights in the WTO and Developing Countries, London/The Hague/Boston: Kluwer Law International
- Winge, T., Andersen, R. & Ramanna Pathak, A. (2013), Combining Farmers' Rights and Plant Variety Protection in Indian Law, in R. Andersen & T. Winge (Eds.), Realising Farmers' Rights to Crop Genetic Resources: Success Stories and Best Practices, pp. 54-61, Abingdon, UK: Routledge
- Wittayapak, C. & Vandergeest, P. (2010), The Politics of Decentralization: Natural Resource Management in Asia, Chiang Mai: Mekong Press
- World Intellectual Property Organization (2010), Committee on Development and Intellectual Property (CDIP), Patent Related Flexibilities in the Multilateral Legal Framework and their Legislative Implementation at the National and Regional Levels, WIPO Doc. CDIP/5/4 Rev. of 18 August 2010, available at: http://www.wipo.int/meetings/en/doc_details.jsp?doc_id=131629 (accessed 30 September 2014)

TRIPS and Climate Change in the International Economic Order

Agnieszka A. Machnicka

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Abstract This article analyses the relationship between the industrial property protection system, as introduced by the TRIPS Agreement, and international arrangements relating to climate change. It aims at providing a picture of how legal, structural and policy-related divergences and convergences between both domains influence the achievement of environmental goals. The difficulties in pursuing climate change mitigation objectives are often attributable to the exclusivity of patent rights, resulting in unavailability of needed technologies. Patent law, as one of the elements of the climate change mitigation scenario, if supported by an adequate regulatory framework and effectively employed within the context of the climate change normative structure (the UNFCCC and the Kyoto Protocol), can contribute to achieving mitigation and adaptation goals.

Dr. Agnieszka A. Machnicka is Senior Researcher at the Faculty of Law of VU University Amsterdam.

A.A. Machnicka (⋈)

VU University Amsterdam, Amsterdam, Netherlands e-mail: a.a.machnicka@vu.nl; agnieszka.machnicka@eui.eu

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1 Introduction

1.1 TRIPS and Its Formerly Expected Role in the International Economic Order

The conclusion of the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS)¹ marked an important point not only in the history of the intellectual property (IP) law system, but also in the creation of the world trade order, in which bargaining power was clearly established and divided between the nations involved. The negotiations surrounding the creation and establishment of the Agreement were conducted in an atmosphere dominated by divisive interests of the countries involved. Those different expectations were straightforward, since it was already in the 1960s that a North-South divide was clearly recognized. Also, it was no secret that intellectual property protection constituted "a bargaining chip for access to foreign markets" of agricultural goods coming from less developed regions. The spirit of these arrangements is mirrored in the remark that "the TRIPS-Agreement clearly assumes that intellectual property rights are the coins with which to pay the entrance fee into free international trade". The final text reflecting the vision of the developed countries was accompanied by the norms incorporating what the less developed nations envisioned as a door opening to let in their own interests (in the form of the general provisions of Articles 7 and 8). Accordingly, when the TRIPS Agreement was launched in 1994, apart from the chief objective of protecting intellectual property owners, the idea was to enhance technological development and to increase the standard of living for all the nations, notwithstanding their different levels of technological advancement. Now, 20 years later, it is clear that these ideas were not realistic. The current world economic order is characterized by enormous and steadily growing differences between developed (and consequently rich) countries, on the one side, and developing countries, on the other side of the spectrum.⁵ The introduction of the TRIPS Agreement did not

¹ Annex 1C of the Marrakesh Agreement Establishing the World Trade Organization, signed in Marrakesh, Morocco, 15 April 1994.

² United Nations, Economic and Social Council, Report by the Secretary-General, The Role of Patents in the Transfer of Technology to Under-Developed Countries, E/3861, E/C.5/52/Rev.1 of 9 March 1964.

³ N. Pires de Carvalho (2010), The TRIPS Regime of Patent Rights, xviii (Foreword).

⁴H. Ullrich (1995), TRIPS: Adequate Protection, Inadequate Trade, Adequate Competition Policy, 4 Pac. Rim L. & Pol'y J. 1995, 153.

⁵ Although it has been reported that the poverty rates continue to fall and, according to the World Bank, the percentage of people living in extreme poverty (with less than \$1.25 a day) fell from 43.1 (in 1990) to 22.7 (in 2008) and further to 20.6 (in 2010), still the estimates are that the proportion of those living in extreme poverty will be 16% by 2015 (and 80% of these in South Asia and Sub-Saharan Africa). These figures are not only dependent on growth of GDP in affected regions, but also on imbalanced distribution of income (e.g., a growing issue in China). The gross national income (GNI) per capita demonstrates serious disproportions between the developed countries

contribute to an equivalent increase of innovation and technological development throughout the countries which acceded to it.

As soon as the TRIPS Agreement was adopted, scholarly voices expressed concerns about the successful realization of the WTO goals framed within this Agreement and relating to facilitation of economic growth and social welfare in developing countries. They evocatively emphasized "the urgency of narrowing the gap in living standards between the rich nations and the poor" and undoubtedly hoped for positive transformations. Although the array of the WTO arrangements brought different advantages to individual member states, in particular liberalized rules on market access and some preferential treatment of least developed countries (LDCs), still dramatic changes in the industrial capacities and national economies did not occur as a result of accession to these agreements. What has certainly increased over the past two decades is the degree of protection for IP owners and, at the same time, the level of deterioration of the natural environment, including critical changes in the Earth's climate, destruction of natural resources and the ever-growing gap between rich and poor nations. The disparities between the countries, when seen from an IP perspective, are reflected in figures which show that patents (and other rights) are granted to holders originating primarily from developed and high-tech countries. These discrepancies are not only economic, technological, but also what follows-social. They are all the more visible and genuine by reason of constant advancement of globalization in every domain.

Notwithstanding these discrepancies, the problem of climate change—which, due to its impact on global security, health, food safety and living space for humans and animals, is one of the most imminent issues that threaten the entire international community—calls for a united engagement towards its mitigation. This strongly depends on a proper balance between diverse national interests and actual possibilities in the light of mutual environmental goals.

⁽e.g., EU: \$33.641 in 2012, and \$34.277 in 2013) and the least-developed countries (in particular in the regions of South Asia and Sub-Saharan Africa: \$1.462 and \$1.351, respectively in 2012, and \$1.474 and \$1.624 in 2013). The data comes from the following sources: World Bank (2013), World Development Indicators 2013, pp. 25-26; World Bank (2014), World Development Indicators 2014, p. 2; World Bank, Economy and Growth, Indicators by country.

⁶ E.g., F.M. Abbott (1998), The Enduring Enigma of TRIPS: A Challenge for the World Economic System, 1 J. Int'l Econ. L. 1998, 497.

⁷ See R.M. Hilty (2015), Ways out of the Trap of Article 1(1) TRIPS, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles (this volume).

⁸ See H. Ullrich (2015), The Political Foundations of TRIPS Revisited, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles (this volume).

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1.2 Enhancing the Debate

This paper analyses the intersection between the intellectual property system (being a part of the international economic order) as reflected in the TRIPS Agreement and the compelling issue of climate change. It aims at illustrating the mutual discrepancies and convergences of both domains (structural, legal, purpose-related) and at setting forth the common ground where they can meet. The links between these seemingly unrelated areas are political, societal, factual and also legal. Concerns about climate change are closely related to the scope of exclusivity built into mitigation and adaptation technologies and, consequently, they overlap with the issues of IP rights and the justified boundaries of IP protection. At the same time, IP has become not only part of the international trade order and trade negotiations, but also an important component in the debates relating to the safeguarding of the environment in general, as well as an almost intrinsic element of the international climate scenario and negotiations in this respect. The extent of IP protection in the environmental sector has a direct impact on freedom of research and access to knowledge and, consequently, to technologies that play an essential role in climate change mitigation and adaptation. It is, therefore, beneficial to examine specific aspects of IP protection system in the exclusive context of climate change.

Although different types of IP rights can be involved in the climate scenario (including plant varieties, or trademarks), the focus of the present analysis is on patents, as they represent the major and the most illustrative form of intellectual property entangled in this problem. Areas such as carbon emission reductions, sustainable development or transfer and dissemination of technologies are directly related to patent protection as an incentive for innovation. Conversely, the provisions in bilateral or plurilateral trade agreements (TRIPS-plus agreements) raise doubts about the practical correlation between strengthening IP rights (IPR), on the one hand, and declarations about "the mutual supportiveness of trade and environment", on the other. The need for enhanced environmental protection, on the one side, and for strong intellectual property rights, on the other, are unchangeably listed as core themes within modern trade arrangements. This is so despite serious practical incompatibilities between these two concepts and their respective underlying values. Are these arrangements only the confirmation of a reluctance to accommodate these values into the existing system of the TRIPS Agreement?

A major question in this respect—whether patent law constitutes a suitable setting for a debate about climate change abatement—has become almost a rhetorical device. The distress of this clichéd image of the patent system lies not only in the prosaic answer of both "yes" and "no", but in an enigmatic acceptance of hopelessness in surpassing certain structural barriers of the system. The evident answer "no" is based on the belief that there are more appropriate for a to better deal with these issues. A positive response, on the other hand, implies a close correlation

⁹ As expressed in paragraph 31 of the Doha Ministerial Declaration adopted on 14 November 2001, WT/MIN(01)/DEC/1.

between patent law and the level of exclusivity in the domain of technologies that play a crucial role in the abatement and adaptation process. Therefore, even though the answer is only partially positive, insofar as patent law is inescapably involved in the climate scenario, the essential question is how patent law and patent practice can for their part contribute to the constructive outcomes in this critical domain. The connection between these two domains is dealt with in this paper.

2 TRIPS and Climate Change: A Mésalliance?

2.1 General Remarks

While the TRIPS Agreement specifies minimum obligations of its Members in relation to IP protection, it simultaneously allows certain flexibilities. These limits to the exclusive rights of IP holders may be based on particular needs of individual countries, on their health policies, social strategies, public order requirements etc. It is framed in general terms in Articles 7 and 8, as well as more specifically for patent rights in Articles 30 (in the form of general normative exceptions) and 31 (individual exceptions—compulsory licences). Because the TRIPS Agreement is based on the principle of territoriality—which in the case of intellectual property rights determines not only their existence (granted by national authorities), but also the scope of those rights and of their protection—individual countries have some room for manoeuvre to accommodate their specific national policies, as referred to in those norms, in their IP systems.

However, environmental issues—and in particular climate change—do not constitute solely national problems, and certainly not the problems of certain countries only. They undeniably are (or should be) a global concern. The TRIPS Agreement is not prepared, in terms of written norms, to face this challenge, which has a large-scale dimension and implications.

The TRIPS Agreement should be seen in a dynamic way, namely not only as a set of legal norms, but as an ensemble comprising all interactions that fall under it, including relations between the members of the WTO system and the policy of the developed countries as dominating actors. This results in a certain phenomenon—of legal and political nature—which is based on written norms (agreement), but undoubtedly incorporates many other aspects of world trade diplomacy, commercial persuasion, and retaliation measures.

Although TRIPS is a trade agreement, focused on trade-related aspects of intellectual property, in practice it strongly influences those domains which—directly or indirectly dependent on commerce—incorporate primarily fundamental societal assets. Those assets are well reflected by the notion of "public goods". This concept was introduced in the 1950s, when Paul Samuelson explicitly differentiated for the purposes of economic analysis between "private consumption goods" and

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"collective consumption goods". 10 Subsequently, this notion was further developed by other scholars (who, amongst other matters, identified the category of "local public goods"¹¹) as well as within the framework of international institutions. ¹² It is generally accepted that these goods are characterized by being non-rivalrous and non-excludable, and that they encompass values such as national security, environmental resources or health protection. From there, it was just an obvious step and a natural consequence to talk about "global public goods" in the epoch of globalization gradually incorporating all the territories of the globe. The idea of "public goods" necessarily also entered the debate within the domain of intellectual property. It touches upon the problems of access to knowledge, share of the benefits that knowledge goods create 14 and, importantly, on the transfer and diffusion of the concrete results. 15 While the aim of the TRIPS Agreement was to introduce harmonization of national IP laws, the objectives of climate change arrangements are global efforts to reduce emissions of greenhouse gases (GHGs) (although each country has its own commitments, they constitute a part of a universal responsibility), thus, there is a structural discrepancy between territorial versus global goals of those different regimes, Nonetheless, the system of TRIPS in practice strongly influences other spheres, including the environmental domain, to the extent that its regulation is partially taken over under the umbrella of this Agreement and the links between TRIPS and climate change have become real.

2.2 Legislative Intersections Between TRIPS and Climate Change Norms

2.2.1 Environmental Provisions in TRIPS

The TRIPS Agreement encompasses provisions which leave room to accommodate values not relating to the protection of IP rights. First, Article 7 frames in general terms the objectives of IP protection. Besides declaring the goals intrinsic to the

¹⁰ P.A. Samuelson (1954), The Pure Theory of Public Expenditure, 36 Rev. Econ. Stat. 1954, 387.

¹¹ C.M. Tiebout (1956), A Pure Theory of Local Expenditures, 64 J. Polit. Econ. 1956, 416.

¹² E.g., European Commission (2002), EU Focus on Global Public Goods, The EU at the WSSD; OECD Development Centre, H. Reisen, M. Soto, T. Weithöner (2004), Financing Global and Regional Public Goods Through ODA: Analysis and Evidence From The OECD Creditor Reporting System, Working Paper No. 232, DEV/DOC(2004)01; International Task Force on Global Public Goods (2006), Meeting Global Challenges: International Cooperation in the National Interest, Report 2006.

¹³ E.g., J.E. Stiglitz (2006), Global Public Goods and Global Finance: Does Global Governance Ensure that the Global Public Interest Is Served?, in J.-P. Touffut (Ed.), Advancing Public Goods, p. 149.

¹⁴ P. Drahos (2004), The Regulation of Public Goods, 7 J. Int'l Econ. L. 2004, 321.

¹⁵ K.E. Maskus & J.H. Reichman (2004), The Globalization of Private Knowledge Goods and the Privatization of Global Public Goods, 7 J. Int'l Econ. L. 2004, 279.

domain of IP, such as technological innovation and dissemination of technology, it sets them against a more universal background of "social and economic welfare", additionally indicating that (IP) rights logically entail certain obligations. The location of this norm amongst the substantive provisions of the Agreement and not in the preamble suggests the mandatory rather than only declaratory nature bestowed on it. While the history of incorporation of this norm ¹⁶ explains its place in the operative part of the agreement, nevertheless, its general wording does not make it apt for direct application. However, at the very least, it may and even must directly inform the interpretation of other provisions of the Agreement. ¹⁷ Article 8 (1) proclaims in an explicit manner the freedom of member countries to adopt such instruments that might be vital in the area of public health protection, or for the advancement of the public interest in sectors that are crucial for the states' socioeconomic and technological development. Neither Article 7 nor Article 8 refer specifically to environmental protection, although it can be seen as being encompassed in the broad and imprecise expression of "the public interest". An explicit reference to the environment is found only in Article 27(2), which provides the exclusion from patentability of certain inventions, namely, those whose commercial exploitation should be prevented in order to protect ordre public and to avoid "serious prejudice to the environment". This latter provision, although being "ready to use" by the administrative authorities and having been adopted by most of the legislatures of the member countries, is hardly ever applied by the relevant granting authorities (patent offices).¹⁸

The TRIPS Agreement refers to the notion of *ordre public*, using the French term. This is explained by the difficulty to translate it into English, because the term does not only mean the public order, but more broadly "matters threatening the social structures which tie a society together". However, the use of the term in its original language can also signify the wish of the drafters to bestow on it a universal character, to create a notion that is not tied to any specific society or values which bind together its members and which naturally may vary among WTO countries. ²⁰

¹⁶ Article 7 is a result of a compromise between the goals promoted respectively by the developed and by the developing countries during the negotiations on the TRIPS Agreement. It was upon the initiative of the developing nations that this rule made its way to the final text. More on the history of the negotiation process: C.M. Correa (2007), Trade Related Aspects of Intellectual Property Rights, A Commentary on the TRIPS Agreement, pp. 91-92; N. Pires de Carvalho (2010), The TRIPS Regime of Patent Rights, pp. 197 et seq.; P.K. Yu (2009), The Objectives and Principles of the TRIPS Agreement, 46 Hous. L. Rev. 2009, 979.

¹⁷ C.M. Correa (2007), Trade Related Aspects of Intellectual Property Rights, A Commentary on the TRIPS Agreement, p. 93.

¹⁸ A more detailed account of this issue: A.A. Machnicka (2012), Environmental Protection and Patent Law, in V. Sancin (Ed.), International Environmental Law: Contemporary Concerns and Challenges, pp. 405-419.

¹⁹ UNCTAD-ICTSD (2005), Resource Book on TRIPS and Development, Ch. 19 (Patents: Ordre Public and Morality), p. 375.

²⁰ As of 26 June 2014, WTO has 160 members.

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Thus, a term that every nation can feel free to fill in with its own set of values was adopted.

In the *Doha Ministerial Declaration* of 14 November 2001²¹ there are several references to the problem of environmental protection. Paragraph 6 proclaims in a declaratory way "the objective of sustainable development". It is suggested that "the protection of the environment and the promotion of sustainable development" constitute one side of the same coin, the other being "an open and non-discriminatory multilateral trading system". The declaration evokes the belief that international trade contributes not only to the promotion of economic development, but also to "the alleviation of poverty" (paragraph 2, Doha Ministerial Declaration). The sharp clash between this statement and reality seems to give to these goals a rather ironic touch and, at the same time, it sprouts serious doubts about the authentic chances to reach other aims referred to in this document. These other objectives with regard to environment are expressed in paragraphs 31-33 on "Trade and environment" (constituting a part of the Work Programme). They require further negotiations on the relationship between WTO rules and obligations resulting from multilateral environmental agreements. Although it is specified that future action should involve the reduction or elimination of trade barriers to environmental goods and services (paragraph 31(iii), Doha Ministerial Declaration), the essential purpose of the announced negotiations is to examine "the effect of environmental measures on market access". 22 This does not leave any uncertainty about the predominant importance of trade-related values in this scenario.

While Articles 7 and 8 of the TRIPS Agreement open the door for an approach that is more accommodating towards policy objectives, including climate change abatement goals, their effective role remains unclear. It was declared by the (WTO) Appellate Body in the *Canada – Term of Patent Protection* case²³ that "those Articles still await appropriate interpretation". The panel confirmed "the applicability of Article 7 or Article 8 of the TRIPS Agreement in possible future cases with respect to measures to promote the policy objectives of the WTO Members that are set out in those Articles".²⁴ However, on another occasion, the WTO panel expressed that although the presence of Article 30 TRIPS logically entails "certain adjustments" to the definition of patent rights (in Article 28 TRIPS), the construction of this norm suggests that the Agreement does not make available anything that would amount to "a renegotiation of the basic balance of the Agreement".²⁵ Therefore, any interpretation of the provisions of the Agreement, even though

²¹ Doha WTO Ministerial (2001), Ministerial Declaration, WT/MIN(01)/DEC/1, adopted 14 November 2001.

²² As clarified in "The Doha Declaration explained", an unofficial explanation of the declaration. ²³ WTO, Appellate Body Report, Canada – Term of Patent Protection, AB-2000-7, WT/DS170/AB/R, adopted 18 September 2000.

²⁴ Ibid., para. 101.

²⁵ WTO, Panel Report, Canada – Patent Protection of Pharmaceutical Products, WT/DS114/R, adopted 17 March 2000, para. 7.26.

made in the light of principles enclosed in Articles 7 and 8, must respect and uphold the overall equilibrium of the Agreement. It is not clear, then, how far individual countries may go in the pursuit of their public policy goals and still be considered as respecting the balance imposed by the TRIPS Agreement. No matter what room for discretion these Articles could possibly guarantee, leaving this question undeveloped contributes to depriving these norms of the power they were expected to have within the TRIPS system. They should have an operative, rather than only decorative, character.

2.2.2 IP Provisions in Climate Change Legislation

The first formally proclaimed environmental concern is to be found in the Declaration of the United Nations Conference on the Human Environment (1972).²⁶ Although this document does not refer to intellectual property rights, it mentions the importance of "scientific research and development in the context of environmental problems". It emphasizes the significance of free flow of scientific information, transfer of experience and availability of environmental technologies in developing countries.²⁷ The objective of "the development and transfer of technology and knowledge" is equally signalled in the treaties relating to the protection of the ozone layer, with no specific mention of the rights protecting the technology. ²⁸ Another pre-TRIPS environmental initiative was made in 1992 within the framework of the UN Conference on Environment and Development. The Rio Declaration on Environment and Development²⁹ emphasized the role of the developed countries (including their new and innovative technologies as well as financial resources) for sustainable development. By contrast, Agenda 21 expressly indicated "the role of patent protection and intellectual property rights" in the access to and transfer of environmentally sound technologies (ESTs), but without imposing any obligations on the countries.³⁰

Emerging concerns about risks of changes in global climate, based on scientific evidence released in the 1980s, led to the establishment by the UN General

²⁶ Declaration of the United Nations Conference on the Human Environment, Report of the United Nations Conference on the Human Environment in Stockholm on 5-16 June 1972, A/CONF.48/14/Rev.1.

²⁷ Ibid., Principle 20.

²⁸ Vienna Convention for the Protection of the Ozone Layer of 22 March 1985, UNEP Doc. IG.53/5, 1513 UNTS 323, 293; Montreal Protocol on Substances that Deplete the Ozone Layer of 16 September 1987, 1522 UNTS 3, 29.

²⁹ Report of the United Nations Conference on Environment and Development (Rio de Janeiro, 3-14 June 1992), Annex I – Rio Declaration on Environment and Development, A/CONF.151/26 (Vol. I), United Nations, General Assembly (12 August 1992).

³⁰Report of the United Nations Conference on Environment and Development (Rio de Janeiro, 3-14 June 1992), Annex II – Agenda 21, A/CONF.151/26 (Vol. I-II), United Nations, General Assembly (12 August 1992), Chapter 34, point 34.10.

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Assembly of the Intergovernmental Negotiating Committee, ³¹ which, supported by the United Nations Environment Programme and the World Meteorological Organization, was assigned to prepare a framework convention on climate change. The Intergovernmental Negotiating Committee, in which delegates from over 150 countries participated, aimed at preparing a treaty that would reflect a consensus and attract support by a majority of countries—both developing and developed.³² The conclusion of the United Nations Framework Convention on Climate Change (UNFCCC)³³ opened a forum for further debate on this specific issue. It was subsequently complemented by the Kyoto Protocol to the United Nations Framework Convention on Climate Change. 34 Following this, the Bali Action Plan 35 of 2007 explicitly voiced the impact of IPRs on the transfer of climate mitigation technologies, pronouncing that countries should "avoid trade and intellectual property rights policies ... restricting transfer of technology". 36 The next step in the climate change negotiations scenario was the Copenhagen Accord³⁷ of 2009, which avoided any precise commitments about global emissions; in addition, under the influence of the U.S., the issue of IPRs was removed from the agreement. In the

³¹ UN General Assembly Resolution 45/212 of 21 December 1990, Protection of global climate for present and future generations of mankind, A/RES/45/212.

³² C. Carpenter et al. (1995), A Brief History of the Framework Convention on Climate Change, IISD Earth Negotiations Bulletin, Vol. 12 No. 12 of 28 March 1995; D. Bodansky (1993), The United Nations Framework Convention on Climate Change: A Commentary, 18 Yale J. Int'l L. 1993, 451, 471-475; U. Beyerlin & T. Marauhn (2011), International Environmental Law, p. 159.

³³ United Nations Framework Convention on Climate Change of 9 May 1992, FCCC/INFOR-MAL/84; A/RES/48/189 (20 January 1994). The UNFCCC came into force on 21 March 1994. Currently, it has 196 Parties.

³⁴ Adopted: 11 December 1997; came into force: 16 February 2005. UN Doc FCCC/CP/1997/7/ Add.1 of 10 December 1997. The Protocol sets quantified emission limitation and reduction commitments for the Parties. The latest amendment was made by the Doha amendment to the Kyoto Protocol to the UNFCCC on 8 December 2012, which set up the quantified emission limitation or reduction commitments for 2013-2020.

³⁵ Decision 1/CP.13 (Bali Action Plan), UNFCCC, Report of the Conference of the Parties on its thirteenth session, held in Bali from 3 to 15 December 2007, FCCC/CP/2007/6/Add.1 of 14 March 2008.

³⁶ Para. 12(b) of the Annex I – "Recommendations for enhancing the implementation of the framework for meaningful and effective actions to enhance the implementation of Article 4, paragraph 5, of the Convention", FCCC/CP/2007/6/Add.1 of 14 March 2008.

³⁷ Decision 2/CP.15 (Copenhagen Accord), UNFCCC, Report of the Conference of the Parties on its fifteenth session held in Copenhagen from 7 to 19 December 2009, FCCC/CP/2009/11/Add.1 of 30 March 2010.

same way, the *Cancun Agreements*³⁸ of 2010 and the *Durban Conference*³⁹ of the Parties in 2011 lacked any reference to IPRs.

Eventually, the outcome document adopted at the UN Conference on Sustainable Development (RIO+20 summit)—"The future we want", 40—assures no formally binding measure. In spite of its reference to intellectual property rights (points 73 and 269), and the emphasis on technology transfer to developing countries, the text does not evoke any commitments.

The absence of reference to IPRs in final documents and of binding commitments in the climate change scenario does not mean that these issues were not on the agenda at the relevant multilateral fora. In fact, they are being regularly raised by developing countries, which ask for limitations on patent rights in relation to climate technologies. A recent example is the debate on IP and transfer of environmentally rational technology within the first meeting in 2014 of the WTO TRIPS Council (25-26 February 2014, Geneva). Representatives of certain nations continuously raise the issues, such as concentration of environmental technologies in the hands of dominant holders (coming predominantly from Japan, the U.S. and Germany), the insufficiency of transfer of needed technologies if made without their adaptation to the local conditions and without prospective engagement of residents in the process of their manufacture, and eventually the inadequacy of "a business approach to a planetary problem". Levinger of the process of their manufacture, and eventually the inadequacy of "a business approach to a planetary problem".

Many initiatives organized within worldwide settings, such as the UN Climate Summit 2014 held in New York (23 September 2014),⁴³ create an optimistic image and are positively received as they also portray a human side of the climate scenario, but unfortunately they do not offer concrete solutions. They tend to take attention away from the inactivity in those areas that are critically urgent. The summary of the talks that took place during the UN Climate Summit 2014 paints a clear picture of the current international landscape, where the objectives of climate change mitigation and adaptation do not constitute a goal *per se*, but are rather

³⁸ Decision 1/CP.16 (The Cancun Agreements), UNFCCC, Report of the Conference of the Parties on its sixteenth session held in Cancun from 29 November to 10 December 2010, FCCC/CP/2010/7/Add/1 of 15 March 2011.

³⁹ UNFCCC, Report of the Conference of the Parties on its seventeenth session held in Durban from 28 November to 11 December 2011, FCCC/CP/2011/9/Add.1 of 15 March 2012.

⁴⁰ UN, General Assembly, 66th session, "Resolution adopted by the General Assembly on 27 July 2012 – The future we want", A/RES/66/288 of 11 September 2012.

⁴¹ A. Bhattacharya (2014), WTO discusses Intellectual Property and Green Technologies Transfer, Third World Network of 3 March 2014; C. Saez (2014), TRIPS Council: Discussion of IP and Innovation Irritates India: Other Issues Unchanged, Intellectual Property Watch of 27 February 2014.

⁴² A. Bhattacharya (2014), WTO discusses Intellectual Property and Green Technologies Transfer, Third World Network of 3 March 2014.

⁴³ UN Climate Summit 2014 on 23 September 2014 in New York, Catalyzing Action; 2014 Climate Change Summary – Chair's Summary of 23 September 2014.

viewed as modern and more attractive business and investment strategies (including sectors of finance, insurance and pension funds).

To complete the picture, certain scientists further the view that climate change is a natural process which takes place on the planet and is independent of human activity. If such were the case, people would solely need to do their best to adapt to the changing circumstances. On the other hand, if this is not the right hypothesis, still, the changes—even if caused by the anthropogenic impact—are a reality which humanity has to face. Therefore, in parallel to the efforts for climate change abatement, the international community has to undertake steps to adapt to the changing natural circumstances (adaptation technologies). One of the initiatives to deal with these issues is the Cancun Adaptation Framework, which was established as part of the Cancun Agreements.⁴⁴

3 IP-Related Impediments to Furthering Environmental and Climate Change Abatement Goals

Traditionally, a chief argument raised by proponents of strong patent protection, including that in the domain of climate change technologies, is that such protection constitutes (1) an incentive to conduct very expensive research, because it offers (2) an exclusive (temporary) opportunity to exploit the invention in order to recover the investment by the right holders and to avoid free-riding by third parties. While these arguments may possess a certain relevance⁴⁵ as far as developed countries are concerned, where the overall market situation and the technological level of competitors would actually allow beneficial returns for the holders and potential profits from infringements, this might not be true for developing countries. In a developed country an expected alternative to free-riding would be either remuneration received by the right holder or a development of a substitute invention by a competitor to enrich society. In contrast, the commercial players in the poorer countries are unable to pay the price of necessary technologies, and they would most likely not become the clients acquiring or licensing them. A likely scenario is that some of the technologies would be illegally used (hence: free-riding) and the technology owner would have little prospect of recovering damages. Alternatively, if patent protection is implemented and effectively enforced, the innovations will never be applied there. This is specifically true if there are cheaper substitutes for expensive technologies, even if those inexpensive alternatives are more damaging

⁴⁴ Decision 1/CP.16 (The Cancun Agreements), UNFCCC, Report of the Conference of the Parties on its sixteenth session held in Cancun from 29 November to 10 December 2010, FCCC/CP/2010/7/Add/1 of 15 March 2011, para. 11-35.

⁴⁵ It is beyond the scope of this paper to discuss other motives – outside the traditional incentive theory – that drive inventors into their inventive activity, such as intrinsic inspiration or scientific research incentive.

for the environment. In addition to the disadvantages that societies in these countries encounter by not having access to climate technologies, even greater losses are being suffered by the global community. The irreversible damage to the natural environment is a factor affecting all countries in the world, the developing and the developed ones (though—for the moment—with a different intensity). Therefore, the IP system should be properly adapted in order to accommodate the envisaged solution to this problem. It should provide for a possibility to effectively allow the critical technologies to be applied also in the regions which do not possess the necessary resources to buy or license them, but that need these technologies to maintain the lowest possible level of environmental destruction. An already existing mechanism of compulsory licensing within TRIPS has proved so far to be less successful than expected. Compulsory licensing in the health domain has showed a very painful way to arrive at a solution 46 that, for various reasons, is hardly ever used in practice. It is an open secret that the effective application of compulsory licensing is shunned in this field. Besides, the major players are very unwilling to extend its application beyond patented medicines to other technologies, such as climate technologies. The field of climate change specifically shows that the system of TRIPS resembles a fortress in the contemporary international scene: built to be unconquerable, it staunchly defends its original underpinnings.

Another aspect that fails to be meaningfully addressed by the patent system is the environment-friendly evolution of technology. It has been pointed out in the literature that "as an economic tool, the patent system itself is environmentally neutral, having little concern for environmental protection or degradation". Nonetheless, environmental effects of inventions (either detrimental or advantageous) are not to be denied and so the goal should be to promote the environment-friendly developments of the innovation system. In addition, the policy objective should be to avoid a scenario where the IP system constitutes a serious impediment to a wide development and diffusion of much-needed technologies, such as environmentally sound technologies.

Some authors express the view that for the time being there is no concrete evidence that patent protection, and strong IPRs in general, are hampering the diffusion of environmental technologies⁴⁸ and that other factors also constitute

⁴⁶The so-called "Paragraph 6 system" which is based on the following: Declaration on the TRIPS Agreement and Public Health, 14 November 2001, WTO Ministerial Conference, Doha 9-14 November 2001, WT/MIN(01)/DEC/2; Implementation of Paragraph 6 of the Doha Declaration on the TRIPS Agreement and Public Health, Decision of the General Council of 30 August 2003, WT/L/540 and Corr.1.

⁴⁷ P. Gormley (1993), Compulsory Patent Licenses and Environmental Protection, 7 Tul. Envtl. L.J. 1993, 131, 132.

⁴⁸ M. Levin (2010), Intellectual Property Rights (IPR) – Another Untested Hurdle in Copenhagen, 2 Nord. Envtl. L.J. 2010, 131, 132-133; J.H. Barton (2007), Intellectual Property and Access to Clean Energy Technologies in Developing Countries, An Analysis of Solar Photovoltaic, Biofuel and Wind Technologies, ICTSD Program on Trade and Environment, Issue Paper No. 2; K. Maskus (2010), Differentiated Intellectual Property Regimes for Environmental and Climate Technologies, OECD Environment Working Papers No. 17.

possible impediments in this area (*e.g.*, "the level of tacit knowledge not covered by IPR"⁴⁹). Many other authors, ⁵⁰ however, see the patent system as directly accountable for difficulties in the access to necessary technologies, especially in developing countries.

A closer look at the domain of environmentally sound technologies allows us to pinpoint certain practical problems directly related to the system of patent protection. As was pointed out by Ecuador during the WTO TRIPS Council meeting in Geneva (25-26 February 2014), one of the difficulties encountered by commercial actors in developing countries is that the information included in the patent applications is not sufficient to exploit the invention after the expiration of the patent. Since patent applications do not include the information necessary to use the invention, they do not allow for the actual transfer of these technologies to developing countries.⁵¹ This problem directly addresses the functioning of the patent system and the scope of individual discretion of the administrative authorities in granting patents for not sufficiently disclosed inventions. It is no secret that patent applicants, while having to adequately disclose the invention in order to get exclusive protection, wish to reveal "as little as they can" to create difficulties for follow-on innovators. The importance of this aspect has been directly tackled by the WIPO Standing Committee on the Law of Patents. 53 which declared that the enabling disclosure requirement of Article 29(1) TRIPS is fundamental to the effective dissemination of knowledge and for further improvement of existing technology. It further explained that despite harmonization of this requirement by the legislation of the WTO Members, certain nuances in interpretation of these provisions can occur in individual countries, 54 but no solution has been offered. However, as suggested by the doctrine, the TRIPS Agreement, by providing (in Article 1(1)) that Members are "free to determine the appropriate method of [its] implementation" allows the realities of each country—including their individual practices and experiences—to influence the interpretation of those norms (e.g., application of different standards for the average level of "a person skilled in the

⁴⁹ M. Levin (2010), Intellectual Property Rights (IPR) – Another Untested Hurdle in Copenhagen, 2 Nord. Envtl. L.J. 2010, 131, 132.

⁵⁰ E.g., A.A. Latif et al. (2011), Overcoming the Impasse on Intellectual Property and Climate Change at the UNFCCC: A Way Forward, ICTSD Programme on Innovation, Technology and Intellectual Property, Policy Brief No. 11.

⁵¹ A. Bhattacharya (2014), WTO discusses Intellectual Property and Green Technologies Transfer, Third World Network of 3 March 2014; Communication from Ecuador, Contribution of Intellectual Property to Facilitating the Transfer of Environmentally Rational Technology, WTO, Council for Trade-Related Aspects of Intellectual Property Rights, IP/C/W/585 of 27 February 2013.

⁵² C.M. Correa (2007), Trade Related Aspects of Intellectual Property Rights, A Commentary on the TRIPS Agreement, p. 301.

⁵³ WIPO (2011), Transfer of Technology, Standing Committee on the Law of Patents, Fourteenth Session, Geneva, January 25 to 29, 2010, SCP/14/4 Rev. of 13 April 2011, p. 29-30.

⁵⁴ Ibid., p. 29.

art").⁵⁵ Consequently, the disparities in the level of technological advancement between individual countries can be alleviated by patent examiners in less developed states requiring that applicants furnish additional information to patent specifications.⁵⁶

A desirable solution to the problem as raised is accurately to assess the basic underpinnings of the patent system itself and its actual functioning. The practice of the patent system should guarantee that patent applications—especially in the field of environmental technologies—fully describe the invention. This serves two following purposes: first, it provides follow-on innovators with sufficient knowledge about the state of the art and allows them to advance the technology beyond a precisely delineated scope of patent exclusivity (without fear of causing an infringement), and second, it assures that when the invention enters the public domain after the patent expires it will truly benefit society.

Another answer to address the specificity of ESTs within the patent system is to effectively employ the measures that would prohibit patent holders from applying defensive patenting of important technologies with the sole purpose of keeping competitors from using them and working on the improvements. Since patent ownership in the field of climate technologies is already rather concentrated, it is important to prevent the right holders from strategically blocking certain technological areas. While the effects of patenting on cumulative research and follow-on innovation in certain fields, such as biotechnology, has been widely discussed, there are differing opinions about the actual effects of strategic patenting in the environmental domain. Certain scholars do not see the danger of blocking further innovation in mechanical technologies, whereas others identify specific blocking strategies in environmental sectors.

Finally, the consolidation of patent protection through the expansion of regional, bilateral or plurilateral trade agreements (the so-called TRIPS-plus agreements) is being made in parallel to international negotiation settings. Individual

⁵⁵ N. Pires de Carvalho (2010), The TRIPS Regime of Patent Rights, p. 348.

⁵⁶ Ibid., pp. 348-349. Similarly, see: UNCTAD-ICTSD (2005), Resource Book on TRIPS and Development, Ch. 24 (Patents: Disclosure Obligations), pp. 452-453.

⁵⁷ See M.A. Heller & R.S. Eisenberg (1998), Can Patents Deter Innovation? The Anticommons in Biomedical Research, 280 Science 1998, 698; H.L. Williams (2010), Intellectual Property Rights and Innovation: Evidence from the Human Genome, NBER Working Paper No. 16213.

⁵⁸ E.g., A. Galasso & M. Schankerman (2014), Patents and Cumulative Innovation: Causal Evidence from the Courts, NBER Working Paper No. 20269, 26-27. The authors, however, note the impact of patent rights on follow-on innovation in complex technology fields, such as electronics (which plays a role in modern renewable energy systems) as well as the correlation between the blocking effect and concentration of patent rights.

⁵⁹ B.K. Sovacool (2013), Energy Policy and Climate Change, in R. Falkner (Ed.), The Handbook of Global Climate and Environmental Policy, p. 446, 453; B.K. Sovacool (2008), Placing a Glove on the Invisible Hand: How Intellectual Property Rights May Impede Innovation in Energy Research and Development (R&D), 18 Alb. L.J. Sci. & Tech. 2008, 381, 419 et seq.

arrangements expressly reaffirm the protection of IP rights in line with the standards established by TRIPS. ⁶⁰

A bird's-eye view on an assemblage composed of various international environmental and climate arrangements and of the TRIPS Agreement forcefully demonstrates that some of those international agreements appear to be "less equal than others" when it comes to their accomplishment and the furthering of their main goals. Certain targets, such as climate-related objectives, are relinquished more easily and readily by the majority of countries than those obligations the effects of which can be grasped more instantly, i.e. trade-related goals. This very short-sighted approach—compelling modern nations to respect their mutual trade obligations, while suspending those arrangements which involve the environmental safeguards—is not a responsible strategy, but it rather illustrates the struggles and division between sense and sensibility.

4 Reflection on Peculiarities of Climate Change Technologies

4.1 Specific Character of Climate-Related Inventions

Numerous voices have been raised in international settings to benefit climate technologies with a waiver analogous to the "paragraph 6 system" that was created for pharmaceutical products. Apart from an ardent opposition to this idea from developed countries primarily based on commercial motives, there are also sceptical opinions about this solution built on more constructive arguments. They argue that differences between medicines and climate technologies are so significant that the same path would not work for the latter.

Firstly, is has been stressed⁶² that a large body of useful knowledge already belongs to the public domain and can be used by all. This seems to be very much the case for ESTs. For example, it is recorded that important innovation in solar technology took place in the 1970s and the underpinnings of modern wind technology were elaborated as early as the 1980s.⁶³ Therefore, while in the pharmaceutical sector an individual patent can secure a very strong market position for its

⁶⁰ E.g., Economic Partnership Agreement between the CARIFORUM States and the European Community, OJ L 289/I/3 of 30 October 2008, Article 139 et seq.; Free Trade Agreement (FTA) between the U.S. and Australia, Chapter 17, Article 17.1 et seq.; FTA between the U.S. and Dominican Republic – Central America, Chapter 15, Article 15.1 et seq.; Chile – U.S. Free Trade Agreement, Chapter 17, Article 17.1 et seq.; or the U.S. – Panama Trade Promotion Agreement, Chapter 15, Article 15.1.

⁶¹ See supra fn. 46.

⁶² E.g., Agenda 21, para. 34.9.

⁶³ E.L. Lane (2011), Clean Tech Intellectual Property, Eco-marks, Green Patents and Green Innovation, p. 6.

holder due to unavailability of substitutes for a specific drug, this—in general—is not the case for ESTs, of which a significant number are no longer protected by patents. ⁶⁴ In such a scenario, what is necessary for the diffusion and effective application of these technologies is the know-how and technological capability, supplemented by proper financial resources. Nevertheless, there might be important (patented) improvements of the existing technologies that make them more efficient, more financially viable or better adapted for certain regions (due to their geography or economic situation) and constitute a *sine qua non* for their application.

Secondly, voices advocating for the general exclusion from patentability of climate technologies encounter certain (apparently constructive) counterarguments. In contrast to pharmaceuticals, which can be copied and produced with relatively little investment, imitation of environmental technologies requires a considerable amount of capital. Renewable energy technologies, energy-generating equipment or energy storage modules (especially photo-voltaic (PV) panels) are very complex and expensive to produce. Reak or non-existent patent protection would discourage licensing of those technologies, and it is precisely a licensing arrangement which brings along a necessary know-how that accompanies the equipment. What is essential in the development and employment of the majority of ESTs is a combination of high capital investment and know-how, while the method of "learning through imitation" might not be the most advantageous in the majority of cases (though it still is for certain domains such as bio-fuels).

Thirdly, proposals to exclude environmentally friendly technologies from patent protection should be treated with a certain care for another reason, i.e. not to discourage environment-friendly developments. If climate-friendly inventions were to be treated in a way that threatens inventors' rights, then there is a risk that inventors will move to innovations that are less climate friendly in order to escape the threat of expropriation or unrestricted compulsory licensing.

In spite of all the above arguments, it should be observed that environmental problems, and especially climate change, constitute a very distinctive issue. As has been rightly observed, strong efforts undertaken by one country or a group of countries will benefit the entire global community, because they will provide

⁶⁴ J.H. Barton (2007), Intellectual Property and Access to Clean Energy Technologies in Developing Countries – An Analysis of Solar Photovoltaic, Biofuel and Wind Technologies, ICTSD Program on Trade and Environment, Issue Paper No. 2, p. 4.

⁶⁵ K. Maskus (2010), Differentiated Intellectual Property Regimes for Environmental and Climate Technologies, OECD Environment Working Papers No. 17, p. 25.

⁶⁶ E.L. Lane (2011), Clean Tech Intellectual Property, Eco-marks, Green Patents and Green Innovation, p. 3; J.H. Barton (2007), Intellectual Property and Access to Clean Energy Technologies in Developing Countries – An Analysis of Solar Photovoltaic, Biofuel and Wind Technologies, ICTSD Program on Trade and Environment, Issue Paper No. 2, p. 9.

⁶⁷ K. Maskus (2010), Differentiated Intellectual Property Regimes for Environmental and Climate Technologies, OECD Environment Working Papers No. 17, p. 25.

climate improvements for everyone (since it is not possible to exclude the others, it creates a free-rider situation). ⁶⁸ Conversely, some countries can equally hinder the endeavours and positive (global) environmental effects that have been reached by other nations. Therefore, this complex situation requires a set of rules involving and binding all nations. In this scenario, the IP system constitutes only a small part of such a necessary undertaking. Within this setting, different countries have different (political and social) responsibilities as regards climate change abatement, depending on (1) their technical capabilities, (2) their financial resources and importantly (3) their individual contribution to environmental degradation, including climate change, and the resulting social costs.

In this light, even if a significant amount of knowledge in the field of environmental technologies already belongs to the public domain, certain innovative and most recent solutions might be more cost-effective in their exploitation or simply more adapted to particular geographical areas. Therefore, it would not be appropriate to exclude at large, as not necessary, any limitations on the patent rights based on this argumentation.

The discussions in international fora and academic writings principally focus on the problem of technology transfer to poorer countries. This approach is certainly not complete and neglects (maybe intentionally) some vital aspects. The actions relating to ESTs should go in two directions and be focused on two channels in parallel. The first channel is the transfer of technology to developing countries (which would take place within the structure offered by the UNFCCC). The second channel consists of a more extensive diffusion of these technologies within the industrialized regions themselves, namely, between more market players in the developed countries. The value of the second aspect is not sufficiently recognized or promoted despite the fact that it is what actually contributes to the development of knowledge and innovation in this very sector. In this light, it is useful to reconsider the deficiencies of the modern patent system against the background of climate-related inventions.

4.2 Embedding TRIPS into the Framework of UNFCCC

The statistics on global emissions of greenhouse gases (GHGs) demonstrate major shares coming from industrialized countries, but at the same time rising quantities from growing developing nations (such as China and India). The data on GHG emissions show that the biggest world polluters are the following: the U.S. (20.6 % of the world's emissions), China (14.7 %), the EU (14 %), Russia (5.7 %), India

⁶⁸ N. Maitra (2010), Access to Environmentally Sound Technology in the Developing World: A Proposed Alternative to Compulsory Licensing, 35 Colum. J. Envtl. L. 2010, 407, 429.

(5.6 %) and Japan (3.9 %). ⁶⁹ In 2008, the United States Environmental Protection Agency showed the contribution to the global CO₂ emission (fossil fuel combustion) to come from China (23 %), the U.S. (19 %), the EU (13 %), India (6 %), Russia (6 %), Japan (4 %), Canada (2 %) and other countries (28 %). ⁷⁰ Also, the International Energy Agency calculated that the five largest world emitters of CO₂—China, the U.S., the EU, India and Russia—account for two-thirds of global emissions. ⁷¹

Although the global use of energy decreased in 2009 due to financial and economic crises, the projections are that the world energy demand will grow progressively after 2015.⁷² Today, the major shifts in the energy demand chart go towards the emerging economies, such as China, India and the Middle East. Their energy use pushes global energy consumption one-third higher.⁷³ The statistics for Asian countries demonstrate that CO₂ emissions calculated per capita more than doubled between 1990 and 2010 in China, Indonesia, Malaysia, Thailand and Vietnam.⁷⁴ Energy efficiency, which is a pivotal aspect in the relationship "energy – the environment – climate change", heavily depends on the technologies that are being used.

Because the industrialized countries have long been and still are the major actors responsible for environmental destruction, including climate change, it is justified that they should also play a primary role in the abatement scenario. This is not only based on a compelling moral obligation, but also emanates directly from the international norms, which can be found both in the TRIPS Agreement as well as in the UNFCCC. Article 4 UNFCCC sets up in general terms obligations of the developed countries to assist the developing countries in meeting costs of adaptation to the adverse effects of climate change (Article 4(4)), to promote, facilitate and finance the transfer of environmentally sound technologies and know-how to developing countries (Article 4(5)). In addition, it also declares that the effective implementation of the commitments under the Convention by the developing countries will depend on the actual implementation by developed countries of their commitments relating to financial resources and transfer of technology (Article 4(7)). For its part, the TRIPS Agreement in Article 66(2) proclaims in the most general manner that developed countries shall create incentives for their enterprises and institutions to promote technology transfer to LDCs. Despite unoptimistic assessments of Article 66(2) TRIPS owing to the fact that little has been achieved

⁶⁹ Data of World Emissions of GHG as of year 2000, in K.A. Baumert, T. Herzog & J. Pershing (2005), Navigating the Numbers. Greenhouse Gas Data and International Climate Policy, World Resources Institute.

 $^{^{70}}$ U.S. Environmental Protection Agency (2008), Global Greenhouse Gas Emissions Data: Emissions by Country.

⁷¹ International Energy Agency (2008), World Energy Outlook 2008, pp. 46-47.

⁷² International Energy Agency (2009), World Energy Outlook 2009, Executive Summary, p. 4.

 $^{^{73}}$ International Energy Agency (2013), World Energy Outlook 2013, Executive Summary, OECD/IEA 2013.

⁷⁴ B.K. Sovacool (2014), Environmental Issues, Climate Changes, and Energy Security in Developing Asia, Asian Development Bank, ADB Economics Working Paper Series No. 399, p. 2.

so far about transfer of technology based on this norm (which is designed as mandatory),⁷⁵ and notwithstanding the general language of the provisions referred to, there is a strong parallel between them. They can be seen as constituting a link between these two international arrangements—the TRIPS Agreement and the UNFCCC. Notably, this highlights that, as regards climate change abatement goals, countries have "common but differentiated responsibilities" (Article 4 (1) UNFCCC) and the burden is clearly placed on industrialized nations. Proximity between these norms as reflecting obligations of technology transfer constitutes a base upon which to provide more specific actions.

Those specific measures can and should be undertaken within the framework that is offered by the UNFCCC and the Kyoto Protocol. They include, amongst other options, the clean development mechanism (CDM), joint implementation (JI) and the system of emissions trading. These mechanisms are intended to offer to industrialized countries a significant level of flexibility in their choice on how to achieve the goals of climate change mitigation in a cost-effective way. The CDM was established by Article 12 of the Kyoto Protocol. It gives an opportunity for industrialized countries (so-called Annex I Parties⁷⁶) to meet the terms of their emission limitation and reduction commitments by founding (emission reduction) projects that would benefit developing countries towards more sustainable development. In turn, the mechanism of joint implementation (Article 6 of the Kyoto Protocol) allows the industrialized countries (Annex I Parties) to transfer between each other emission reduction units resulting from emission reduction projects carried out with other industrialized countries. The emissions trading system, introduced by Article 17 of the Kyoto Protocol, allows the countries with the emissions reduction commitments to trade between them their unused quotas. It does not effectively limit the actual emissions of the GHGs, but only shifts the figures in their universal calculation mode; nor does it equip the poor regions with the needed climate change abatement tools.

It would be advisable to establish a more consistent relationship between the IP protection system (reflected in the TRIPS Agreement) and the endeavours within the CDM to bring about meaningful measures. The industrialized countries should encourage within their territories and their national systems the development of inventions made specifically with the purpose of benefiting and complying with the needs of the countries which are to receive technologies for climate change mitigation and adaptation actions within the CDM. How should they go about encouraging research and development of those technologies that are principally

⁷⁵ K. Maskus (2010), Differentiated Intellectual Property Regimes for Environmental and Climate Technologies, OECD Environment Working Papers No. 17, p. 11; C.M. Correa (2007), Intellectual Property in the LDCs: Strategies for Enhancing Technology Transfer and Dissemination, Background Paper No. 4, UNCTAD, The Least Developed Countries Report 2007, pp. 23-24; S. Moon (2008), Does TRIPS Art. 66.2 Encourage Technology Transfer to LDCs? An Analysis of Country Submissions to the TRIPS Council (1999-2007), UNCTAD – ICTSD Project on IPRs and Sustainable Development, Policy Brief No. 2, pp. 5-6.

⁷⁶Countries listed in Annex I to the UNFCCC.

useful for those geographical areas where developing and LDCs are located (parallel with research and development of medicines for tropical diseases)? It would need to be in the form of publicly funded research programmes engaging equally big enterprises as well as less dominant market actors. The technology development lines should not be left to the total discretion of the inventors, but determined by the public authorities (co-operating at the international level with other contributors as well as with the countries that are to benefit from these programmes). These robust actions should be undertaken by the policy makers, because the patent system alone cannot stimulate the development of those technologies; instead the demand for them should be created and supported by specific regulatory measures. The state authorities should not only contribute financially to those climate technology projects (creating a relevant economic environment), but also provide a sufficient coordination framework.

Although the CDM offers certain solutions, it is a voluntary framework. In addition, an empirical analysis of a number of projects shows that the contribution of the CDM to technology transfer is relatively modest (technology transfer, in fact, not constituting its objective). For that reason, all hopes and efforts should not be focused on the CDM scheme, but further, far-reaching goals set up by the worldwide community are necessary. What is needed is a proper coordination on a global scale of different interests, namely, national (which are various for different countries) and international.

An important initiative toward this goal is the Green Climate Fund (GCF)—established by the Cancun Agreements (at the 16th session of the Conference of the Parties of the UNFCCC, COP 16).⁷⁸ It has the status of an operating entity of the financial mechanism of the Convention. In the years following its establishment, the subsequent Conferences of the Parties took decisions relating to the governing instruments of the GCF (COP 17),⁷⁹ localization of its headquarters (COP 18),⁸⁰

⁷⁷ One study shows that out of 1,000 CDM projects examined, only 265 involved technology transfer. K. Das (2011), Technology Transfer under the Clean Development Mechanism: An Empirical Study of 1000 CDM Projects, The Governance of Clean Development – Working Paper Series, Working Paper 014, pp. 3, 28. Another study, carried out by the UNFCCC, demonstrates that about 30% of projects involve technology transfer. UNFCCC (2010), The Contribution of the Clean Development Mechanism under the Kyoto Protocol to Technology Transfer. See also S. Seres & E. Haites (2008), Analysis of Technology Transfer in CDM Projects. ⁷⁸ Decision 1/CP.16 (The Cancun Agreements), UNFCCC, Report of the Conference of the Parties on its sixteenth session held in Cancun from 29 November to 10 December 2010, FCCC/CP/2010/7/Add/1 (15 March 2011), para. 102.

⁷⁹ Decision 3/CP.17 (Launching the Green Climate Fund) and Annex (Governing instrument for the Green Climate Fund), UNFCCC, Report of the Conference of the Parties on its seventeenth session, held in Durban from 28 November to 11 December 2011, FCCC/CP/2011/9/Add.1 (15 March 2012) at 55-66.

⁸⁰ The host of the GCF is Songdo, Incheon, Republic of Korea. Decision 6/ CP.18, UNFCCC, Report of the Conference of the Parties on its eighteenth session, held in Doha from 26 November to 8 December 2012, FCCC/CP/2012/8/Add.1 (28 February 2013).

establishment of the secretariat and selection of the Executive Director (COP 19).81 The plans are to achieve an effective operationalization of the GCF when the required threshold (i.e. 50 %) of pledged financial contributions is fully executed by the contributing Parties (COP 20). 82 The GCF functions under the guidance of and is accountable to the Conference of the Parties (UNFCCC). It is governed and supervised by the Board composed of 24 members, of which equal numbers come from developing and developed countries. The financial inputs for the Fund are to be received principally from developed country Parties to the UNFCCC.⁸³ The financial resources are intended to support developing countries' climate-changerelated actions and projects, such as low-emission development strategies, mitigation projects, national adaptation action plans and similar activities.⁸⁴ The actual functioning of the GCF and the efficacy of its strategies and their implementation is still to be seen. An international scheme in which each country contributes a different amount according to its resources and its share of global emissions is a fair and reasonable starting point. However, this worldwide scheme should be designed taking into consideration that certain rapidly growing developing countries equally constitute substantial polluters in a global chart, but for the time being are not committed to specific emission reductions (the UNFCCC and the Kyoto Protocol from their inception impose unequal obligations on the developed and developing countries). In addition, they have demonstrated substantial interest in protecting their emergent IP values (e.g. China and India), so in the end the negative perception of strong protection seems not so clear-cut.

The Technology Mechanism of the UNFCCC, 85 which was established in 2010 (COP 16), 86 aims at facilitating technology development and transfer. The Cancun Agreements expressly proclaim that priority areas encompass deployment and diffusion of ESTs and know-how in developing countries, increased (public and private) investment in technology development, strengthening of national systems of innovation, and development of national technology plans for mitigation and adaptation. 87 The schemes run within the broad framework of the Technology

⁸¹ Decision 4/CP.19, UNFCCC, Report of the Conference of the Parties on its nineteenth session, held in Warsaw from 11 to 23 November 2013, FCCC/CP/2013/10/Add.1 (31 January 2014).

⁸² UNFCCC, Conference of the Parties on its twentieth session, held in Lima from 1 to 14 December 2014.

^{83 &}quot;Governing Instrument for the Green Climate Fund" (Annex to Decision 3/CP.17), para. 29. The countries are currently announcing their contributions to the GCF; they agreed that the Fund needs to reach \$10–15 billion (\$10.2 billion was pledged by contributing Parties by COP 20). See: S. Yeo (2014), Green Climate Fund receives \$1.3 billion in new pledges, RTCC of 3 October 2014; V. Volcovici (2014), International Green Climate Fund May See Major U.S. Contribution, Peru Foreign Minister Says, Huffington Post of 10 October 2014; Green Climate Fund (2014), Green Climate Fund Welcomes Contribution by Swedish Government, GCF – Website of 23 October 2014.

⁸⁴ "Governing Instrument for the Green Climate Fund" (Annex to Decision 3/CP.17), para. 35-36.

⁸⁵ Composed of: Technology Executive Committee and Climate Technology Centre and Network.

⁸⁶ Decision 1/CP.16 (The Cancun Agreements), UNFCCC, Report of the Conference of the Parties on its sixteenth session, held in Cancun from 29 November to 10 December 2010, FCCC/CP/2010/7/Add.1 (15 March 2011), paras. 117 et seq.

⁸⁷ Ibid., para, 120.

Mechanism should effectively implement the flexibilities offered by the TRIPS Agreement. Projects—involving research—which are (nationally or internationally) developed with the aim of achieving the goals of the UNFCCC and sponsored by the Green Climate Fund should be covered by a special regime. This research, together with its innovation output, should fully benefit from the compulsory licensing system, including cross-licensing, in order to achieve the widest diffusion of relevant technologies.

5 Concluding Remarks

The present paper is based on the belief that scholarly and political attention should not only focus on the excessively protectionist approach of the developed (industrialized) countries on the one side, and resulting disadvantages of poorer nations on the other, but also on the factual divisions within society itself, where the evergrowing domination of big and powerful corporations leads to a serious weakening of the position of individuals and their interests. Allocation of benefits that come from technological development and innovation is not uniform amongst the nations, but likewise, it is often not uniform across different groups within the same country. When these differences touch upon (public) goods—such as access to health, medical methods, quality of food, access to information for research purposes or a clean and safe natural environment—the issue becomes a major concern.

The most relevant period in relation to the aforesaid problems is the era opened by the important developments in the U.S. patent law that took place in the 1980s. These changes marked a move towards strengthening protection at the national level (*e.g.*, extension of patentability to new areas, such as biotechnology; creation of a specialized court to deal with patent issues—the Court of Appeals of the Federal Circuit; possibility for universities to patent and license inventions made with federal subsidies—the Bayh-Dole Act 1980), ⁸⁸ which in turn influenced the developments in the international arena and the introduction of the TRIPS Agreement. As demonstrated by scholarly analysis and noted by several nations, the international harmonization of IP rights (and specifically patents) generated great shifts of revenue between different countries, and the U.S. is by far the main beneficiary of these changes. ⁸⁹

⁸⁸ N.T. Gallini (2002), The Economics of Patents: Lessons from Recent U.S. Patent Reform, 16 J. Econ. Persp. 2002, 131, 133-135.

⁸⁹ E.g., in 2001, the net increase in the value of (U.S.) patents applied for in 1988 was \$4.5 billion; net transfers associated with TRIPS benefited the U.S. with \$4,553 million, Germany with \$788 million, France: \$569 million, Italy: \$231 million, Sweden: \$71 million and Switzerland: \$22 million. Data provided by P. McCalman (2001), Reaping What You Sow: An Empirical Analysis of International Patent Harmonization, 55 J. Int'l Econ. 2001, 161, 163, 178-179.

When the vast movement towards expanding patent protection took place in the U.S. legal system in the 1980s, and—with a focus on specific technologies only—within the EU system in the 1990s, 90 and when the TRIPS Agreement was adopted (1994), the emergence of environmental problems was not as intense and critical as it is now, in the year 2014. The rules drafted 20 years ago neither intended to anticipate any such problems, nor envisaged a possible integration of these values and concerns into the structure of the patent system as embraced and designed by TRIPS. The question is whether the nations should be eternally bound by what was decided during the Uruguay Round or rather the legal framework should adapt to the changing circumstances, especially in the light of already revealed general problems relating to the (not perfectly) functioning patent system as such.

Additionally, this paper argues that the TRIPS Agreement does not provide an adequate framework to address the issues relating to the safeguard and supply of necessary public goods. Nonetheless, the availability of these goods strongly depends on the structure of the patent system. Climate change is a field that exemplifies this shortcoming. The deficiencies affecting the patent system in general⁹¹ also influence the domain of climate-related technologies. The specific elements which need to be taken into consideration as regards climate-related inventions include: structuring the patent system and patent policy so that they better favour small and medium enterprises (SMEs), effective requirement of full disclosure of inventions and limitation of the possibility of monopolistic appropriation (by private corporations) through the exclusive licensing agreements of inventions made by universities and with public funds. The guarantee of full disclosure of patented inventions should be secured through restrictive controls and checks by the (national and regional) patent offices. Further focus should be on avoiding strategic patenting and accumulation of huge patent portfolios in the hands of leading enterprises that do not use them (administrative control of such activities and implementation of effective compulsory licensing strategies to combat and discourage this would be desirable; in turn, the application of competition rules, as an ex post control, would come only when the harm was done to competitors and to

⁹⁰Council Regulation (EEC) No 1768/92 of 18 June 1992 concerning the creation of a supplementary protection certificate for medicinal products, OJ L 182 of 2 July 1992, pp. 1–5; Directive 98/44/EC of the European Parliament and of the Council of 6 July 1998 on the legal protection of biotechnological inventions, OJ L 213 of 30 July 1998, pp. 13-21.

⁹¹ Such as controversies about the right scope of patent protection to incentivize innovation and to encourage improvements of existing inventions by competitors, problems of preventive patenting, issues relating to cumulative research and the access to research tools. The debate on these problems goes beyond the scope of the present analysis. For the discussion of these issues, see: S. Scotchmer (1991), Standing on the Shoulders of Giants: Cumulative Research and the Patent Law, 5 J. Econ. Persp. 1991, 29; L.G. Branstetter (2004), Do Stronger Patents Induce More Local Innovation?, 7 J. Int'l Econ. L. 2004, 359; J. Lerner (2002), Patent Protection and Innovation Over 150 Years, NBER Working Paper 8977; Y. Qian (2007), Do National Patent Laws Stimulate Domestic Innovation in a Global Patenting Environment? A Cross-Country Analysis of Pharmaceutical Patent Protection, 1978-2002, 89 Rev. Econ. Stat. 2007, 436; N.T. Gallini (2002), The Economics of Patents: Lessons from Recent U.S. Patent Reform, 16 J. Econ. Persp. 2002, 131.

innovation⁹²). The fear of inventing around existing inventions (because of the unclear scope of patent exclusivity) and, consequently, waiting for patent expiry in order to improve current developments is disadvantageous both for society (which will not get an improved technology from other inventors in the short term, resulting in no alternatives and high prices) and for competitors (the original patent holder can advance innovation in this field without competition and thus monopolize current and future innovation). In modern fields—such as ESTs—the innovation process is very rapid; waiting for patent expiry slows down the parallel developments within a given domain and hampers the positive effects that improved technology can have on the environment. A viable solution could be the efficient application to climate-related inventions of the concept offered by Article 31(1) TRIPS—a compulsory licence for improvements. In turn, the strengthening of the position of small and medium enterprises (SMEs) and their active involvement in the creation and application of climate-relevant innovation would be positive both socially and technologically. Although it is argued that climate-related technologies are better handled by big corporations with substantial economic resources, it seems worthwhile to effectively engage the research potential of SMEs in this sector as well. This would be important for developing countries, but not only for them. In the developed countries, the position and perceptions of SMEs are often closer to the social reality and, consequently, they can better recognize not only the demands of the market, but also current social values and consumers' needs.

The patent system is one of the elements in the climate scenario and must be supported by multiple strategies and examined together with other issues. One of the important aspects is the states' contribution to the development of needed technologies, especially in the form of publicly funded research. This research, subsidized through public grants and performed by universities and research institutes, should fall under a specific regime, in the sense that its results could not be exclusively licensed to and appropriated by dominating actors in the field. This would constitute a significant segment towards building a more effective system of climate-related innovation.

The environmental problems occurring on our planet pose a serious challenge to patent law and prompt the question whether it should embrace public policy of climate change as an inherent value and as its integral component, rather than seeing it as a limitation to the scope of protection of the right holders. Given that neither the amendments to the black-letter rules of the TRIPS Agreement, nor the establishment of a separate legal protection regime for climate technologies can soon be expected, these problems call for certain improvements; they require that the existing norms of TRIPS be read in a more flexible manner and that necessary

⁹² H. Ullrich (2012), Intellectual Property: Exclusive Rights for a Purpose – The Case of Technology Protection by Patents and Copyright, in K. Klafkowska-Waśniowska et al. (Ed.), Problemy Polskiego i Europejskiego Prawa Prywatnego- Księga pamiątkowa Profesora Mariana Kępińskiego, pp. 425, 432.

policy adjustments take place. It was argued at the dawn of the TRIPS Agreement that the effects of IP protection are case sensitive, ⁹³ strongly depend on the specific industry and vary significantly across sectors. Consequently, the "context-sensitive role" of IP rights constitutes a strong argument for a flexible implementation and interpretation of TRIPS. ⁹⁴ The role of patent protection in climate-related technologies should be seen differently than in other sectors.

The WTO, although having admitted the absence of climate change problems in the context of its activity and work programme, has nevertheless signalled the intersection of climate change measures with international trade. The voice of the WTO in the sustainable development scenario lacks any substantive and concrete qualities and is of a rather rhetorical character. Nevertheless it is clear that it wishes to secure its say in the climate-change setting for the purpose of being able to control its developments. Following this, dominant enterprises focus their attention more on cost-efficient activities and their own profits rather than on a long-term approach regarding the environmental safeguard. An answer to this deficiency could be found in a decentralization of the climate technologies amongst more actors on the market. Currently, those technologies are characterized by a strong concentration in the hands of few leading players within their sectors.

A major problem with furthering global environmental goals is the dimension of the actions that must be undertaken so that required results are reached. Within a domestic system, thus on a smaller scale, it is easier to strike a balance between different, even conflicting interests, such as public interests and private commercial advantages involved in innovation activity. The same objectives become more dispersed and nebulous when set out for the international community. While profits are not immediately available, a free-rider position is often the most convenient and opportune choice.

References

Abbott, F.M. (1998), The Enduring Enigma of TRIPS: A Challenge for the World Economic System, 1 J. Int'l Econ. L. 1998, 497, Oxford: Oxford University Press

Barton, J.H. (2007), Intellectual Property and Access to Clean Energy Technologies in Developing Countries, An Analysis of Solar Photovoltaic, Biofuel and Wind Technologies, ICTSD Program on Trade and Environment Issue Paper No. 2, Geneva: ICTSD

Baumert, K.A., Herzog, T. & Pershing, J. (2005), Navigating the Numbers, Washington: World Resources Institute

Beyerlin, U. & Marauhn, T. (2011), International Environmental Law, Oxford: Hart Publishing

⁹³ F.M. Abbott (1998), The Enduring Enigma of TRIPS: A Challenge for the World Economic System, 1 J. Int'l Econ. L. 1998, 497, 504.

⁹⁴ Ibid., 497

⁹⁵ E.g., WTO (2011), Harnessing Trade for Sustainable Development and a Green Economy.

- Bhattacharya, A. (2014), WTO discusses Intellectual Property and Green Technologies Transfer, Third World Network of 3 March 2014, available at: www.twn.my/title2/intellectual_property/info.service/2014/ip140301.htm (accessed 11 November 2014)
- Bodansky, D. (1993), The United Nations Framework Convention on Climate Change: A Commentary, 18 Yale J. Int'l L. 1993, 451, 471-475, New Haven: Yale Law School
- Branstetter, L.G. (2004), Do Stronger Patents Induce More Local Innovation?, 7 J. Int'l Econ. L. 2004, 359, Oxford: Oxford University Press
- Carpenter, C. et al. (1995), A Brief History of the Framework Convention on Climate Change, IISD Earth Negotiations Bulletin, Vol. 12 No. 12 of 28 March 1995, New York City: IISD Reporting Services
- Carvalho, N. (2010), The TRIPS Regime of Patent Rights, 3rd ed., Alphen aan der Rijn: Kluwer Correa, C.M. (2007), Intellectual Property in the LDCs: Strategies for Enhancing Technology Transfer and Dissemination, Background Paper No. 4, UNCTAD, The Least Developed Countries Report 2007, available at: http://unctad.org/sections/ldc_dir/docs/ldcr2007_Correa en.pdf (accessed 11 November 2014)
- Correa, C.M. (2007), Trade Related Aspects of Intellectual Property Rights, A Commentary on the TRIPS Agreement, Oxford: Oxford University Press
- Das, K. (2011), Technology Transfer under the Clean Development Mechanism: An Empirical Study of 1000 CDM Projects, The Governance of Clean Development – Working Paper Series, Working Paper 014, Norwich: University of East Anglia
- Drahos, P. (2004), The Regulation of Public Goods, 7 J. Int'l Econ. L. 2004, 321. Oxford: Oxford University Press.
- European Commission (2002), EU Focus on Global Public Goods, The EU at the WSSD, available at: http://ec.europa.eu/environment/archives/wssd/pdf/publicgoods.pdf (accessed 11 November 2014)
- U.S. Environmental Protection Agency (2008), Global Greenhouse Gas Emissions Data: Emissions by Country, available at: http://www.epa.gov/climatechange/ghgemissions/global.html (accessed 28 September 2014)
- Galasso, A. & Schankerman, M. (2014), Patents and Cumulative Innovation: Causal Evidence from the Courts, NBER Working Paper No. 20269, Cambridge, MA: National Bureau of Economic Research
- Gallini, N.T. (2002), The Economics of Patents: Lessons from Recent U.S. Patent Reform, 16 J. Econ. Persp. 2002, 131, Pittsburgh: AEA Publications
- Gormley, P. (1993), Compulsory Patent Licenses and Environmental Protection, 7 Tul. Envtl. L.J. 1993, 131, New Orleans: Tulane University Law School
- Heller, M.A. & Eisenberg, R.S. (1998), Can Patents Deter Innovation? The Anticommons in Biomedical Research, 280 Science 1998, 698, Washington: AAAS
- Hilty, R.M. (2015), Ways out of the Trap of Article 1(1) TRIPS, in H. Ullrich, R.M. Hilty,M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles (p. 185), Heidelberg: Springer (this volume)
- International Energy Agency (2008), World Energy Outlook 2008, Paris: IEA
- International Energy Agency (2009), World Energy Outlook 2009, Paris: IEA
- International Energy Agency (2013), World Energy Outlook 2013, Paris: IEA
- International Task Force on Global Public Goods (2006), Meeting Global Challenges: International Cooperation in the National Interest, Report 2006
- Latif, A.A. et al. (2011), Overcoming the Impasse on Intellectual Property and Climate Change at the UNFCCC: A Way Forward, ICTSD Programme on Innovation, Technology and Intellectual Property, Policy Brief No. 11, Geneva: ICTSD
- Lerner, J. (2002), Patent Protection and Innovation Over 150 Years, NBER Working Paper 8977, Cambridge, MA: National Bureau of Economic Research
- Lane, E.L. (2011), Clean Tech Intellectual Property. Eco-marks, Green Patents and Green Innovation, Oxford: Oxford University Press

- Levin, M. (2010), Intellectual Property Rights (IPR) Another Untested Hurdle in Copenhagen, 2 Nord. Envtl. L.J. 2010, 131, Uppsala: Nordic Env. Law Journal
- Machnicka, A.A. (2012), Environmental Protection and Patent Law, in V. Sancin (Ed.), International Environmental Law: Contemporary Concerns and Challenges, Ljubljana: GV Založba Publ. House
- Maitra, N. (2010), Access to Environmentally Sound Technology in the Developing World: A Proposed Alternative to Compulsory Licensing, 35 Colum. J. Envtl. L. 2010, 407, New York City: Columbia Journal of Environmental Law
- Maskus, K. (2010), Differentiated Intellectual Property Regimes for Environmental and Climate Technologies, OECD Environment Working Papers No. 17, available at: http://dx.doi.org/10. 1787/5kmfwjvc83vk-en (accessed 30 September 2014)
- Maskus, K.E. & Reichman, J.H. (2004), The Globalization of Private Knowledge Goods and the Privatization of Global Public Goods, 7 J. Int'l Econ. L. 2004, 279, Oxford: Oxford University Press
- McCalman, P. (2001), Reaping What You Sow: An Empirical Analysis of International Patent Harmonization, 55 J. Int'l Econ. 2001, 161, Oxford: Oxford University Press
- Moon, S. (2008), Does TRIPS Art. 66.2 Encourage Technology Transfer to LDCs? An Analysis of Country Submissions to the TRIPS Council (1999-2007), UNCTAD – ICTSD Project on IPRs and Sustainable Development, Policy Brief No. 2, Geneva: ICTSD
- OECD Development Centre (2004), Financing Global and Regional Public Goods Through ODA: Analysis and Evidence From The OECD Creditor Reporting System, Working Paper No. 232, DEV/DOC(2004)01, available at: www.oecd.org/development/pgd/24482500.pdf (accessed 27 October 2014)
- Qian, Y. (2007), Do National Patent Laws Stimulate Domestic Innovation in a Global Patenting Environment? A Cross-Country Analysis of Pharmaceutical Patent Protection, 1978-2002, 89 Rev. Econ. Stat. 2007, 436, Cambridge, MA: Harvard Kennedy School
- Saez, C. (2014), TRIPS Council: Discussion of IP and Innovation Irritates India: Other Issues Unchanged, Intellectual Property Watch of 27 February 2014, available at: www. ip-watch.org/2014/02/27/trips-council-discussion-of-ip-and-innovation-irritates-india-other-issues-unchanged/ (accessed 25 October 2014)
- Samuelson, P.A. (1954), The Pure Theory of Public Expenditure, 36 Rev. Econ. Stat. 1954, 387, Cambridge, MA: Harvard Kennedy School
- Scotchmer, S. (1991), Standing on the Shoulders of Giants: Cumulative Research and the Patent Law, 5 J. Econ. Persp. 1991, 29, Pittsburgh: AEA Publications
- Seres, S. & Haites, E. (2008), Analysis of Technology Transfer in CDM Projects, available at: http://cdm.unfccc.int/Reference/Reports/TTreport/TTrep08.pdf (accessed 30 October 2014)
- Sovacool, B.K. (2008), Placing a Glove on the Invisible Hand: How Intellectual Property Rights May Impede Innovation in Energy Research and Development (R&D), 18 Alb. L.J. Sci. & Tech. 2008, 381, Albany: Albany Law School
- Sovacool, B.K. (2013), Energy Policy and Climate Change, in R. Falkner (Ed.), The Handbook of Global Climate and Environmental Policy, Hoboken: Wiley-Blackwell
- Sovacool, B.K. (2014), Environmental Issues, Climate Changes, and Energy Security in Developing Asia, ADB Economics Working Paper Series No. 399, Metro Manila: Asian Development Bank
- Stiglitz, J.E. (2006), Global Public Goods and Global Finance: Does Global Governance Ensure that the Global Public Interest Is Served?, in J.-P. Touffut (Ed.), Advancing Public Goods, Cheltenham: Edward Elgar
- Tiebout, C.M. (1956), A Pure Theory of Local Expenditures, 64 J. Polit. Econ. 1956, 416, Chicago: University of Chicago Press
- Ullrich, H. (1995), TRIPS: Adequate Protection, Inadequate Trade, Adequate Competition Policy, 4 Pac. Rim L. & Pol'y J. 1995, 153, Washington: University of Washington School of Law
- Ullrich, H. (2012), Intellectual Property: Exclusive Rights for a Purpose The Case of Technology Protection by Patents and Copyright, in K. Klafkowska-Waśniowska et al. (Ed.), Problemy

- Polskiego i Europejskiego Prawa Prywatnego- Księga pamiątkowa Profesora Mariana Kepińskiego, Warszawa: Wolters Kluwer
- Ullrich, H. (2015), The Political Foundations of TRIPS Revisited, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles (p. 85), Heidelberg: Springer (this volume)
- UN (1972), Declaration of the United Nations Conference on the Human Environment, Report of the United Nations Conference on the Human Environment in Stockholm on 5-16 June 1972, A/CONF.48/14/Rev.1
- UN (1990), UN General Assembly Resolution 45/212 of 21 December 1990, Protection of global climate for present and future generations of mankind, A/RES/45/212
- UN (1992), Report of the United Nations Conference on Environment and Development, Rio de Janeiro, 3 to 14 June 1992, Annex I – Rio Declaration on Environment and Development & Annex II – Agenda 21, A/CONF.151/26, United Nations, General Assembly of 12 August 1992
- UN (2012), General Assembly, 66^{th} session, "Resolution adopted by the General Assembly on 27 July 2012 The future we want", A/RES/66/288 of 11 September 2012
- UN (2014), United Nations Climate Summit 2014, New York, Catalyzing Action; 2014 Climate Change Summary – Chair's Summary of 23 September 2014, available at: http://www.un.org/ climatechange/summit/2014/09/2014-climate-change-summary-chairs-summary/ (accessed 30 September 2014)
- UNCTAD-ICTSD (2005), Resource Book on TRIPS and Development, Cambridge University Press.
- UNFCCC (2010), The Contribution of the Clean Development Mechanism under the Kyoto Protocol to Technology Transfer, Bonn: Climate Change Secretariat (UNFCCC)
- Volcovici, V. (2014), International Green Climate Fund May See Major U.S. Contribution, Peru Foreign Minister Says, available at: http://www.huffingtonpost.com/2014/10/10/international-green-climate-fund-us_n_5966006.html (accessed 30 October 2014)
- WIPO (2011), Transfer of Technology, Standing Committee on the Law of Patents, Fourteenth Session, Geneva, January 25 to 29, 2010, SCP/14/4 Rev. of 13 April 2011
- WTO (2001), Ministerial Declaration, Ministerial Conference, Fourth Session, Doha, November 9 to 14, 2001, WT/MIN(01)/DEC/1 of 20 November 2001
- WTO (2011), Harnessing Trade for Sustainable Development and a Green Economy, Geneva: WTO
- WTO (2013), Communication from Ecuador, "Contribution of Intellectual Property to Facilitating the Transfer of Environmentally Rational Technology", Council for Trade-Related Aspects of Intellectual Property Rights, IP/C/W/585 of 27 February 2013
- Yeo, S. (2014), Green Climate Fund receives \$1.3 billion in new pledge, available at: http://www.rtcc.org/2014/09/24/green-climate-fund-receives-1-3-billion-in-new-pledges/ (accessed 30 October 2014)
- Yu, P.K. (2009), The Objectives and Principles of the TRIPS Agreement, 46 Hous. L. Rev. 2009, 979, Houston: Houston Law Review

Establishing Conformity Between TRIPS and Human Rights: Hierarchy in International Law, Human Rights Obligations of the WTO and Extraterritorial State Obligations Under the International Covenant on Economic, Social and Cultural Rights

Klaus D. Beiter

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Prof. Dr. Klaus D. Beiter, LL.B. (Pretoria) is Marie Curie Intra-European Fellow at the University of Lincoln and Associate Professor at North-West University (Potchefstroom Campus), Faculty of Law, South Africa.

K.D. Beiter (⋈)

School of Education, University of Lincoln, Lincoln, UK e-mail: klaus.dieter.beiter@ip.mpg.de

Abstract The Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), in its design and implementation procedures, does not reflect a human rights approach. There is an ever-growing community of critical voices, however, requiring that human rights should serve as a corrective to intellectual property rights and their implementation in the context of TRIPS. The crucial question is, of course, how this goal may be accomplished. Under TRIPS, human rights constitute non-essential exceptions to intellectual property rights. However, obligations under international human rights law (IHRL) can only be a relevant consideration if either the World Trade Organisation (WTO) itself or its members, when acting as such—or both—are bound by IHRL. If this should be the case, the question as to the exact relationship between the norms under TRIPS and those of IHRL will arise. Is IHRL hierarchically superior to WTO law? This chapter will show that both the WTO and its members, as such, are the bearers of obligations under IHRL and that, in many instances, norms of IHRL will have to be held to rank above "international trade law". This should have consequences in particular for the way the WTO enforces TRIPS within its dispute settlement system. The rules of treaty interpretation under customary international law (as codified in Article 31 of the Vienna Convention on the Law of Treaties of 1969) offer substantial scope for human rights considerations to play a role in WTO dispute settlement. Attempts at establishing conformity between TRIPS and IHRL should, moreover, take account of extraterritorial obligations flowing from the various UN human rights treaties, specifically also the International Covenant on Economic, Social and Cultural Rights (ICESCR) of 1966, and their implications for state conduct. States parties to the ICESCR are not only obliged to observe Covenant provisions where the effects of any of their actions are confined to the domestic level, but also if their conduct, for example within the WTO, affects the economic, social and cultural rights (ESCR) of populations in other countries. The Committee on Economic, Social and Cultural Rights (CESCR), the body of independent experts supervising implementation of the ICESCR—which so far has proven highly capable of advancing the cause of ESCR globally—should adopt a more proactive approach in defining extraterritorial obligations under the ICESCR, also in relation to WTO law, and should further be bold enough to adopt a clear stance in cases of conflict between TRIPS and IHRL.

1 Introduction

A wealthy man comes to see his Rabbi, lamenting his woes, explaining that his life is a misery. The Rabbi takes the man to the window overlooking the street and asks him to look through the glass pane, "What do you see?" The man replies, "Well, I see children playing, a handsome young man helping an elderly lady, grateful for

the assistance offered, cross the street, a group of well-dressed businessmen and women strolling along the pavement and sharing a joke, and cheerful folks of all origins enjoying a break in a café". The Rabbi then takes the man to a mirror, "What do you see now?" "Now I see myself!", the man replies. "You see", the Rabbi explains, "that is our problem: It's also just a glass pane; but, the moment we add a bit of silver, we only see ourselves!"

This parable perhaps best explains the fundamental difference between the two fields of international law—known as international trade and international human rights law (IHRL), respectively—at stake here. The World Trade Organisation (WTO) and its various sets of normative provisions, including the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), belong to the former. While IHRL is more like looking through a normal window onto life outside. international trade law resembles seeing solely oneself in the mirror. Although it has been suggested that human beings and their inalienable rights constitute the basis of both these fields of law, 1 a view to be revisited in the next section, the truth rather appears to be that the essential underpinnings of both areas of law are diametrically opposed: Whereas human beings and their inherent dignity do constitute the basis of IHRL, international trade law is aimed at creating such conditions as will enable the actors involved to freely trade goods, services and "technology protected by intellectual property rights", thus appealing to essentially selfish motives, as underlie attempts at gaining access to markets, selling goods and services there, making others depend on one's technology and—above all—earning enormous profits. A field of law whose premise, first and foremost, is to enable those successfully relying on (or should one say exploiting?) its rules to gather "all the bits of silver" they can, will—by its very nature—"lose sight" of human beings and their rights. Protecting human rights does not constitute a prerequisite for trade to take place without impediments. On the contrary, human rights will often obstruct free trade.

The problem of fragmentation in international law and the situation where the norms of "self-contained" legal regimes may conflict with those of general international law or those of other "self-contained" legal regimes have long since been recognised.² In many instances, the conflict is between human rights and another body of law. As difficult as resolving conflicts between IHRL and other bodies of law may be, this appears realistic for conflicts between human rights and, for example, international humanitarian, criminal or environmental law. It is far more difficult, however, where conflicts between international human rights and international trade law are concerned. The reason for this is that, whereas in the case of the former type of conflict, "the protection of the principles of humanity and the

¹ See, e.g., E.-U. Petersmann (2000), From "Negative" to "Positive" Integration in the WTO: Time for "Mainstreaming Human Rights" into WTO Law?, 37 CML Rev. 2000, 1375. See, however, P. Alston (2002), Resisting the Merger and Acquisition of Human Rights by Trade Law: A Reply to Petersmann, 13 EJIL 2002, 815–844.

²Generally on the topic, see M. Koskenniemi (2006), Fragmentation of International Law: Difficulties Arising from the Diversification and Expansion of International Law, Report of the Study Group of the International Law Commission, UN Doc. A/CN.4/L.682 of 13 April 2006.

dictates of the public conscience" or human dignity may ultimately be viewed as the common basis of the legal regimes concerned, this notion is totally absent from international trade law. At the same time, with the fate of many poor countries hinging on the way international trade law is interpreted, applied, developed and changed, human rights assume—or should assume—an ever-increasing corrective function in constructing a just and fair international trade system. This holds true also with regard to the TRIPS Agreement, which is at the centre of the discussion in the present chapter. ⁴ TRIPS cannot be considered a "closed system" unrelated to IHRL. The principle of "systemic integration", to be dealt with later on, "[gives] expression to and ... [keeps] alive, [a] sense of the common good of humankind. not reducible to the good of any particular institution or 'regime'". The question whether, and to what extent, human rights can—and legitimately may—play a role in facilitating the protection of intellectual property rights under the TRIPS Agreement in a way as to justify describing such protection as "IP protection with a human face" arose for the first time at the end of the last century. Ever since, much has been written about the topic.⁶ A number of solutions emphasising different aspects have been proposed, all of them acknowledging, however, that human rights can and should play a role in this regard.⁷

³ See Art. 1(2) of the Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (Protocol I), 8 June 1977 and the Preamble to the Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of Non-International Armed Conflicts (Protocol II), 8 June 1977 – the so-called "Martens Clause", which may been seen to reflect the grundnorm of international humanitarian law.

⁴ So-called TRIPS-plus agreements, concluded between two or a handful of states and seeking to achieve enhanced levels of trade liberalisation and IP protection for the states concerned, have proliferated in recent years and pose an even greater threat to human rights than TRIPS itself. Although issues related to these agreements will occasionally be referred to in this chapter, the discussion will focus more closely on TRIPS as such. For an indication of human rights concerns associated with TRIPS-plus agreements, see, e.g., P.K. Yu (2012), Intellectual Property and Human Rights in the Nonmultilateral Era, 4 Fla. L. Rev. 2012, 1088–1091.

⁵ See M. Koskenniemi (2006), Fragmentation of International Law: Difficulties Arising from the Diversification and Expansion of International Law, Report of the Study Group of the International Law Commission, UN Doc. A/CN.4/L.682 of 13 April 2006, para. 480. On the relationship between WTO law, as a "self-contained" legal regime, and general international law, see paras. 165–171.

⁶ For an extensive bibliography of books, journal articles, UN and NGO reports and online publications on the relationship between IP and human rights, including TRIPS and human rights, see L. Helfer & G.W. Austin (2011), Human Rights and Intellectual Property: Mapping the Global Interface, pp. 523–537. For a very recent comprehensive publication on the topic, see C. Geiger (Ed.) (2015), Research Handbook on Human Rights and Intellectual Property.

⁷ One commentator thus remarked that it is necessary to "go back to fundamentals": "[G]lobal intellectual property law will, sooner or later, have to ... return to the fundamental values that are expressed in the Universal Declaration of Human Rights. It will have to address the ways the values in that instrument were given effect by the provisions of United Nations' treaty law, including the threefold objectives of the UN Charter itself (international peace and security; economic equity; and the progressive realisation of universal human rights), the universal

Twenty years after the adoption of the TRIPS Agreement it is apposite to assess the current state of the debate (and the law) on the subject. At the same time, an attempt should be made at constructing a sound doctrinal basis providing legitimacy to endeavours aimed at enhancing the systematic infusion of the whole TRIPS regime with human rights values, specifically those of an economic, social and cultural nature. Apart from thus addressing questions enquiring as to the way in which "conflicts" between TRIPS and IHRL may be stated to exist, the basis on which the WTO may be considered to be the bearer of obligations under IHRL, whether there exists a hierarchy of norms in international law and how human rights considerations should influence the resolution of disputes before the WTO dispute settlement bodies, a special emphasis will be put on the implications of extraterritorial state obligations under the International Covenant on Economic, Social and Cultural Rights (ICESCR) of 1966 for TRIPS and on the role the Committee on Economic, Social and Cultural Rights (CESCR) may play in promoting conformity between TRIPS and IHRL. The Covenant protects economic, social and cultural rights (ESCR), the category of human rights particularly threatened in the WTO context, the CESCR being the body of independent experts that supervises implementation of the ICESCR. It seems this will be the first time that the topic of extraterritorial state obligations under IHRL is discussed in the context of TRIPS in scholarly writing.

2 Conflicts Between the Protection of Intellectual Property Rights Under TRIPS and International Human Rights Law

It has been indicated that the essential underpinnings of international trade and IHRL are very different. An argument that has repeatedly been made by a commentator in an extensive list of legal writings⁸ and which is frequently quoted in the literature is to the effect that international trade law is, in fact, based on and directed at the realisation of human rights. Ernst-Ulrich Petersmann thus holds that "[m]ost human rights guarantees are about individual freedom, non-discrimination, equal opportunities, and rule of law", that there exist "strong rationales for legal and judicial protection of economic freedom and property rights" and that the WTO

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human rights principles in the UDHR and the covenants and treaties that have followed it." See M. Kirby (2011), Intellectual Property Law, Human Rights and the HIV/AIDS Pandemic: The Urgent Need for a Luther of Jurisprudence, 42 IIC 2011, 255.

⁸ See the many contributions by E.-U. Petersmann cited by P. Alston (2002), Resisting the Merger and Acquisition of Human Rights by Trade Law: A Reply to Petersmann, 13 EJIL 2002, at fn. 3. ⁹ See E.-U. Petersmann (2000), The WTO Constitution and Human Rights, 3 J. Int'l Econ. L. 2000,

¹⁰ Ibid., 23.

system must or should, in fact, be understood as promoting these very guarantees. ¹¹ "Economic freedom" covers the freedom "to produce and exchange goods and services including one's labour and ideas"—as it were, a right to free trade. ¹² Economic freedom, Petersmann opines, serves to promote social rights: "As freedom from hunger and economic welfare are preconditions for the enjoyment of many other human rights, the WTO guarantees of economic liberties and of welfare-increasing cooperation across frontiers serve important *human rights functions*". ¹³ Petersmann also mentions that poverty in developing countries "is attributed by many economists to their lack of effective human rights guarantees and of liberal trade and competition laws", and he laments the absence of "effective legal and judicial protection of liberty rights and property rights" in these countries. ¹⁴ Petersmann hence argues that international trade law should fully embrace "the human rights approach" underlying it. Like the European Court of Justice, it should recognise "the principle of free movement of goods and freedom of competition, together with freedom of trade as a fundamental right". ¹⁵

An eloquent attempt has been made by Philip Alston at showing that this construction of international trade law is not correct. ¹⁶ Economic freedom, non-discrimination and property rights under the WTO are very different from human rights. They are not conferred on individuals "in the sense of human rights" and are not premised on the inherent dignity of all persons, this being the *raison d'être* for recognising a claim as a human right. ¹⁷ On the contrary, they have a very instrumentalist objective:

Trade-related rights are granted to individuals for instrumentalist reasons. Individuals are seen as objects rather than as holders of rights. They are empowered as economic agents for particulars purposes and in order to promote a specific approach to economic policy, but not

¹¹ Ibid., 24–25.

¹² See E.-U. Petersmann (2002), Time for a United Nations "Global Compact" for Integrating Human Rights into the Law of Worldwide Organisations: Lessons from European Integration, 13 EJIL 2002, 629.

¹³ See E.-U. Petersmann (2000), From "Negative" to "Positive" Integration in the WTO: Time for "Mainstreaming Human Rights" into WTO Law?, 37 CML Rev. 2000, 1375 (emphasis in original).

¹⁴ See E.-U. Petersmann (2002), Time for a United Nations "Global Compact" for Integrating Human Rights into the Law of Worldwide Organisations: Lessons from European Integration, 13 EJIL 2002, 632.

¹⁵ See E.-U. Petersmann (2002), Human Rights in European and Global Integration Law: Principles for Constitutionalising the World Economy, in A. Von Bogdandy, P. Mavroidis & Y. Mény (Eds.), European Integration and International Coordination: Festschrift für C.D. Ehlermann, p. 387.

¹⁶ See P. Alston (2002), Resisting the Merger and Acquisition of Human Rights by Trade Law: A Reply to Petersmann, 13 EJIL 2002, 815–844.

¹⁷ Admittedly though, the IP rights provided for under TRIPS are more akin to individual rights in the sense of human rights than any other trade-related rights in the WTO system. In this vein, see P. Alston (2002), Resisting the Merger and Acquisition of Human Rights by Trade Law: A Reply to Petersmann. 13 EJIL 2002, 826.

as political actors in the full sense and nor as the holders of a comprehensive and balanced set of individual rights. There is nothing *per se* wrong with such instrumentalism but it should not be confused with a human rights approach.¹⁸

Naturally, this applies to the market freedoms as protected in the context of the European Union as well. Apart from this, it should be appreciated that "a right to freedom of trade" is not as such recognised in any of the major human rights instruments. It also occurs very sparsely in national constitutions. Likewise, there is no global consensus as to whether property should be recognised as a human right. Though it appears in the exhortatory Universal Declaration of Human Rights of 1948, it is not guaranteed in the legally binding International Covenants on Human Rights, as states, at the time of drafting, were unable to agree on the proper measure of compensation in case of expropriation, this reflecting that many societies do not view property as an absolute right conferring an entitlement to "full" (rather than "fair") compensation in case of expropriation.

This absence of a human rights basis in the WTO agreements is true for the TRIPS Agreement too. The purpose of TRIPS is not primarily to protect IP rights "in the sense of human rights", but rather—apart from promoting innovation and in a wider context—that of strengthening the international system of unimpeded trade. The origin of TRIPS may thus be traced back to the conviction in the U.S.A. that there should be "a multilateral framework of principles, rules and disciplines dealing with international trade in counterfeit goods". The preamble to TRIPS emphasises as one of the agreement's central objectives that of "reduc[ing] distortions and impediments to international trade" and uses the term "trade-related" intellectual property rights. Deeply steeped in notions of free trade, the TRIPS Agreement cannot be considered to follow a human rights approach in its design or content. This has been pointed out already more than 10 years ago in a report prepared by the UN High Commissioner for Human Rights and it remains true today. The report notes, for example, that

the overall thrust of the TRIPS Agreement is the promotion of innovation through the provision of commercial incentives. The various links with the subject matter of human rights – the promotion of public health, nutrition, environment and development – are generally expressed in terms of exceptions to the rule rather than the guiding principles themselves and are made subject to the provisions of the Agreement. A human rights approach, on the other hand, would explicitly place the promotion and protection of human rights, in particular those in [the ICESCR], at the heart of the objectives of intellectual

¹⁸ Ibid.

¹⁹ At most, there can be said to be a principle of law embracing just (rather than free) trade. See C. Lumina (2008), *Free* Trade or *Just* Trade? The World Trade Organisation, Human Rights and Development (Part 1), 12 Law, Democracy & Development 2008, 20–40 and C. Lumina (2010), *Free* Trade or *Just* Trade? The World Trade Organisation, Human Rights and Development (Part 2), 14 Law, Democracy & Development 2010, 288–313.

²⁰ Thus now recognised in the third recital to the preamble of the TRIPS Agreement. See C. Clift (2010), Why IPR Issues were brought to GATT: A Historical Perspective on the Origins of TRIPS, in C.M. Correa (Ed.), Research Handbook on the Protection of Intellectual Property under WTO Rules: Intellectual Property in the WTO, Vol. 1, pp. 3–21.

property protection, rather than only as permitted exceptions that are subordinated to the other provisions of the Agreement.²¹

Moreover, whereas TRIPS sets out the content of IP rights in considerable detail. it is notoriously vague when it comes to providing guidance regarding the responsibilities of IP right holders. Preventing the abuse of rights, steps against anticompetitive practices or promotion of technology transfer are merely referred to. A human rights approach would set out minimum requirements for each of these in the same way that TRIPS sets out minimum requirements for the protection of copyright, trade marks or patents. ²² Additionally, in the sphere of patent protection, TRIPS takes away that degree of autonomy that states should enjoy under the right to development to decide on their development strategies in accordance with their respective level of development so as to be able to guarantee an adequate level of protection of human rights.²³ Prior to TRIPS, states were free to decide on the forms of technology they would make patentable and on the level of patent protection they would accord having regard to their development needs. Pharmaceuticals could, for example, be excluded from protection. Under Article 27(1) TRIPS, patents "shall [now] be available for any inventions, whether products or processes, in all fields of technology".24

There are many ways in which intellectual property rights as protected under the TRIPS Agreement may conflict with accepted international human rights.²⁵ Before mentioning some examples in support of this statement, two points should be clarified.

Firstly, "international human rights" for purposes of the discussion means human rights as protected by customary international law, the "general principles

²¹ See Report of the UN High Commissioner for Human Rights, The Impact of the Agreement on Trade-Related Aspects of Intellectual Property Rights on Human Rights (2001), UN Doc. E/CN.4/Sub.2/2001/13, para. 22. See also L. Forman (2011), An Elementary Consideration of Humanity? Linking Trade-Related Intellectual Property Rights to the Human Right to Health in International Law, 14 J. W. Intell. Prop. 2011, 155–175, who, at 170, states: "There is something absurd in having to go to such great lengths to establish that human life should be worth more than property or trading interests. Having to do so defies common sense. Yet, this is not the common sense encoded into TRIPS, which relegates health protection to a non-essential exception to a property right".

²² See Report of the UN High Commissioner for Human Rights (2001), UN Doc. E/CN.4/Sub.2/2001/13, para. 23.

²³ Art. 2(3) of the UN Declaration on the Right to Development, UNGA Res. 41/128 of 4 December 1986, thus states that "States have the right and the duty to formulate appropriate national development policies that aim at the constant improvement of the well-being of the entire population and of all individuals, on the basis of their active, free and meaningful participation in development and in the fair distribution of the benefits resulting therefrom".

²⁴ See Report of the UN High Commissioner for Human Rights (2001), UN Doc. E/CN.4/Sub.2/2001/13, para. 24.

²⁵ For an overview, see F. Papadopoulou (2011), TRIPS and Human Rights, in A. Kur & M. Levin (Eds.), Intellectual Property Rights in a Fair World Trade System: Proposals for Reform of TRIPS, pp. 283–286.

of law recognised by civilised nations" and international conventions. Of particular importance are the human rights laid down in the "international bill of human rights", i.e. the Universal Declaration of Human Rights (UDHR) of 1948, the International Covenant on Civil and Political Rights (ICCPR) of 1966 and the International Covenant on Economic, Social and Cultural Rights (ICESCR) also of 1966. As it is specifically economic, social and cultural rights (ESCR) that are threatened in the TRIPS context, the stress will be on the latter Covenant.

The key provision to understanding the nature of state obligations flowing from the various substantive rights provisions (on the rights to food, health, education, etc.) of the ICESCR is Article 2(1). This requires states parties "to take steps, individually and through international assistance and cooperation, especially economic and technical, to the maximum of [their] available resources, with a view to achieving progressively the full realisation of the rights recognised in the ... Covenant by all appropriate means, including particularly the adoption of legislative measures". Article 2(1) may create the impression that obligations to fulfil rights under the Covenant solely entail "obligations of result", expecting states parties to achieve a certain result at some point in the future only. The correct

²⁶ Universal Declaration of Human Rights, UNGA Resolution 217A (III) of 10 December 1948, International Covenant on Civil and Political Rights of 1966, 999 UNTS 171, entry into force on 23 March 1976, International Covenant on Economic, Social and Cultural Rights of 1966, 993 UNTS 3, entry into force on 3 January 1976. The Universal Declaration protects both civil and political, and economic, social and cultural rights. Having been adopted in the form of a UN General Assembly Resolution, it is non-binding. The two covenants constitute binding treaties under international law. Supervision of implementation of the ICCPR is entrusted to the Human Rights Committee (HRC), supervision of implementation of the ICESCR to the Committee on Economic, Social and Cultural Rights (CESCR), both bodies being composed of independent experts.

²⁷ Whereas civil and political rights are generally accepted as "proper" human rights, ESCR are still misconstrued by many as no or only "second class" human rights. For a general discussion in justification of the "full legal quality" of ESCR, see K. Arambulo (1999), Strengthening the Supervision of the International Covenant on Economic, Social and Cultural Rights: Theoretical and Procedural Aspects, pp. 100-112, 114-129; or K.D. Beiter (2006), The Protection of the Right to Education by International Law: Including a Systematic Analysis of Article 13 of the International Covenant on Economic, Social and Cultural Rights, pp. 54-83 and the references there. For "the ways" in which the ICESCR as a treaty "is not taken seriously", see B. Simma (1991), The Implementation of the International Covenant on Economic, Social and Cultural Rights, in F. Matscher (Ed.), The Implementation of Economic and Social Rights: National, International and Comparative Aspects, pp. 75-79. For a discussion of the nature of state obligations under the ICESCR, see, e.g., P. Alston & G. Quinn (1987), The Nature and Scope of States Parties' Obligations under the International Covenant on Economic, Social and Cultural Rights, 9 Hum. Rts. Q. 1987, 156-229; M. Craven (1998), The International Covenant on Economic, Social and Cultural Rights: A Perspective on Its Development, pp. 106–152; K.D. Beiter (2006), The Protection of the Right to Education by International Law: Including a Systematic Analysis of Article 13 of the International Covenant on Economic, Social and Cultural Rights, pp. 373-401; or M. Ssenyonjo (2010), Economic, Social and Cultural Rights: An Examination of State Obligations, in S. Joseph & A. McBeth (Eds.), Research Handbook on International Human Rights Law, pp. 36-70. See also CESCR, General Comment No. 3, The Nature of States Parties' Obligations (Art. 2(1) ICESCR), UN Doc. E/1991/23.

interpretation, however, is that Article 2(1) read with the Covenant's rights provisions also gives rise to immediate "obligations of conduct". ²⁸ There is an obligation, "within a reasonably short time after the Covenant's entry into force for the States concerned", to take steps that are "deliberate, concrete and targeted as clearly as possible" towards meeting the obligations in the Covenant. ²⁹ There is, moreover, "a minimum core obligation to ensure the satisfaction of, at the very least, minimum essential levels of each of the [Covenant] rights". ³⁰ A failure to meet minimum core obligations needs to be justified by "demonstrat[ing] that every effort has been made to use all resources that are [available] in an effort to satisfy, as a matter of priority, those minimum obligations". ³¹ Covenant rights may be limited under Article 4. This is a general limitation provision, permitting only such limitations "as are determined by law only in so far as this may be compatible with the nature of these rights and solely for the purpose of promoting the general welfare in a democratic society". ³²

The second point needing clarification is that of the exact meaning of the notion of "conflicts" when saying that obligations under TRIPS may conflict with those arising under IHRL. "Conflicts" in a narrow sense would be instances where obligations under TRIPS are incompatible with rights or obligations flowing from IHRL, i.e. where implementing the former inevitably leads to "breach" of the latter. Conflicts of this nature are not likely to be expected very often. It is rather conflicts in a broad sense that one would encounter. In these cases, TRIPS obligations are not directly incompatible with rights or obligations of IHRL, but enforcing the former would limit the latter, as the various norms would seek to promote different underlying values.³³

²⁸ "Obligations of conduct" expect states to undertake a specific course of conduct at a certain point in time. Against that, "obligations of result" expect states to achieve a particular result at a foreseeable point. The nature of the action taken to achieve the result and the means applied in this respect are left to state discretion. The distinction between "obligations of conduct" and "obligations of result" has its origin in the work of the International Law Commission. See Report of the International Law Commission in the Yearbook of the International Law Commission, 2(2), 1977, 11–30.

²⁹ See CESCR, General Comment No. 3, The Nature of States Parties' Obligations (Art. 2 (1) ICESCR), UN Doc. E/1991/23, para. 2.

³⁰ Ibid., para, 10.

³¹ Ibid. In its General Comment No. 14, The Right to the Highest Attainable Standard of Health (Art. 12 ICESCR), UN Doc. E/2001/22, the CESCR applies an even stricter standard. At para. 47, it stresses that "a State party cannot, under any circumstances whatsoever, justify its non-compliance with [certain] core obligations . . . , which are non-derogable".

³² On Art. 4 ICESCR, see K.D. Beiter (2006), The Protection of the Right to Education by International Law: Including a Systematic Analysis of Article 13 of the International Covenant on Economic, Social and Cultural Rights, pp. 453–458 and the references there.

³³ On the notion of "conflicts" between the norms of different bodies of international law, see F. Papadopoulou (2011), TRIPS and Human Rights, in A. Kur & M. Levin (Eds.), Intellectual Property Rights in a Fair World Trade System: Proposals for Reform of TRIPS, pp. 286–287 or E. De Wet & J. Vidmar (2012), Conclusions, in E. De Wet & J. Vidmar (Eds.), Hierarchy in International Law: The Place of Human Rights, p. 300.

IP rights as protected under TRIPS may conflict with IHRL in the following ways:

- For instance, trade marks or copyright may conflict with the right to freedom of expression, this covering the freedom to seek, receive and impart information, as protected in Article 19 of the International Covenant on Civil and Political Rights (ICCPR) of 1966. Regarding trade marks, the use of distinctive signs in parodies or other critical statements could be considered to infringe trade mark rights.³⁴ Concerning copyright, right holders could use their right to suppress the publication of information.³⁵ The TRIPS Agreement does allow limitations or exceptions to trade mark or copyright protection in Articles 17 and 13, respectively. But, as noted above, the provisions are vague and do not provide guidance aimed at securing an interpretation fully complying with human rights standards.
- Article 15(1) ICESCR protects the rights of everyone: "(a) [t]o take part in cultural life [and] (b) [t]o enjoy the benefits of scientific progress and its applications". It has been considered that the former covers the availability "of cultural goods and services that are open for everyone to enjoy and benefit from, including libraries, museums, theatres, cinemas . . .; literature, . . . and the arts in all forms" and also their accessibility in the sense that they must be within financial reach. ³⁶ A similar statement can naturally be made with regard to the benefits of scientific progress and its applications. ³⁷ IP rights by their very nature are exclusionary rights and any access granted will have (substantial) financial implications. Hence, a tension exists between IP rights and the rights protected in Article 15(1)(a) and (b). Yet again, resolving potential conflicts is not addressed in any detail by TRIPS.
- "[T]here are ... tensions between IP protection and the protection of the knowledge of local and indigenous communities. In particular, issues arise

³⁴ See, e.g., the famous decision of the Constitutional Court of South Africa in Laugh It Off Promotions CC v. South African Breweries International (Finance) BV t/a Sabmark International and Another (CCT 42/04) [2005] ZACC 7; 2006 (1) SA 144 (CC); 2005 (8) BCLR 743 (CC) (27 May 2005), which emphasised that in deciding cases of alleged infringement of a trade mark by trade mark parody due consideration had to be given to the right to freedom of expression.

³⁵ In Ashdown v. Telegraph Group Ltd (2001), EWCA Civ 1142 Lord Phillips, at para. 30, states: "Thus copyright is antithetical to freedom of expression. It prevents all, save the owner of the copyright, from expressing information in the form of the literary work protected by the copyright." It is sometimes stated that copyright law already addresses freedom of speech issues "from within" by virtue of its own rules limiting the availability of copyright protection, for example, in the light of the idea/expression dichotomy, or allowing certain unauthorised uses of a protected work under "fair dealing", "public interest", "fair use" or similar defences. Though there may be an element of truth in this, many copyright law experts consider that, in applying limitations and exceptions in copyright law, many "national courts and legislatures have been wrongly influenced by restrictive interpretations." See (the preamble to the) Declaration: A Balanced Interpretation of the Three-Step Test in Copyright Law, published in 39 IIC 2008, 707–713.

³⁶ See CESCR, General Comment No. 21, The Right of Everyone to Take Part in Cultural Life (Art. 15(1)(a) ICESCR), UN Doc. E/2010/22, para. 16(a) and (b).

³⁷ The Committee has not prepared a General Comment on this issue yet.

concerning the use of such knowledge by people outside the community without the knowledge holders' consent. Similarly, issues arise in relation to the equitable compensation for use of such knowledge where such use has led to the patenting of new knowledge." It has been emphasised that there is a need to strengthen the autonomy of indigenous communities, notably through procedures ensuring their prior informed consent, and to install a system in terms of which these communities can be granted *sui generis* IP rights with regard to their traditional knowledge or its applications. Existing patent rules as provided for in the TRIPS Agreement would thus require adaptation, also because much traditional knowledge and its applications does not meet the novelty or non-obviousness requirement. ³⁹

Obligatory patent protection under TRIPS is seen by many to substantially collide with the right to health, as protected in Article 14 ICESCR. ⁴⁰ Patent rights on pharmaceuticals essentially required to treat HIV/AIDS or other serious health conditions/diseases in "non-affluent" countries—such patents, by their very nature, making medicine expensive—have prevented realisation of the right to health in those countries. The CESCR, in its General Comment No. 14 on the Right to Health, states that Article 14 covers the availability of essential drugs and

³⁸ See Report of the UN High Commissioner for Human Rights (2001), UN Doc. E/CN.4/Sub.2/ 2001/13, para. 26. Art. 31(1) of the legally non-binding United Nations Declaration on the Rights of Indigenous Peoples (UNGA Resolution 61/295 of 13 September 2007) provides in the second sentence that indigenous peoples "have the right to maintain, control, protect and develop their intellectual property over [their] cultural heritage, traditional knowledge, and traditional cultural expressions". Art. 31(2) goes on to state that "[i]n conjunction with indigenous peoples, States shall take effective measures to recognise and protect the exercise of [the rights mentioned in Art. 31(1)]". Legally binding provisions ensuring that indigenous communities be required to give their consent to the use of their traditional knowledge and protecting their right to be compensated for any such use have been laid down as regards biodiversity-related traditional knowledge in Art. 8 (j) of the Convention on Biodiversity (1760 UNTS 79, entry into force on 29 December 1993) and as regards plant genetic resources for food and agriculture in Arts. 5.1(d) and 9 of the (FAO) International Treaty on Plant Genetic Resources for Food and Agriculture, this treaty having been adopted on 3 November 2001 and having entered into force on 29 June 2004. Note should also be taken of Art. 15(1) of the (ILO) Convention concerning Indigenous and Tribal Peoples in Independent Countries of 1989 (No. 169) (entry into force on 5 September 1991), which provides that "[t]he rights of the peoples concerned to the natural resources pertaining to their lands shall be specially safeguarded. These rights include the right of these peoples to participate in the use, management and conservation of these resources".

³⁹ See R.J. Coombe (1998), Intellectual Property, Human Rights and Sovereignty: New Dilemmas in International Law Posed by the Recognition of Indigenous Knowledge and the Conservation of Biodiversity, 6 Ind. J. Global Legal Stud. 1998, 95–101, 110–112.

⁴⁰ For a comprehensive treatment of the subject matter of TRIPS and the right to health, see H.P. Hestermeyer (2007), Human Rights and the WTO: The Case of Patents and Access to Medicines or P. Xiong (2012), An International Law Perspective on the Protection of Human Rights in the TRIPS Agreement: An Interpretation of the TRIPS Agreement in Relation to the Right to Health. Generally on the relationship between IP rights and the right to health, see L. Helfer & G.W. Austin (2011), Human Rights and Intellectual Property: Mapping the Global Interface, pp. 90–170.

also their economic accessibility for all, including socially disadvantaged groups. Article 8(1) TRIPS allows members to "adopt measures necessary to protect public health". The Doha Declaration on the TRIPS agreement and public health, adopted at the WTO Ministerial Conference in 2001, calls upon WTO members to use the flexibilities built into TRIPS, including compulsory licensing and parallel importing, to promote access to medicines for all. TRIPS has even been amended to make it easier for countries to import cheaper generic medicines made under compulsory licensing if they are unable to manufacture the medicines themselves. In practice, however, many problems remain.

Another instance where IP law has negatively affected the enjoyment of human rights is that of commercial seed varieties protected by IP rights posing a threat to food security and the realisation of the right to food, as protected in Article 11 ICESCR. 44 Article 27(3)(b) TRIPS requires WTO members to provide for the protection of plant varieties either by patents, an effective *sui generis* system or any combination thereof. Where they opt for patent protection, farmers cultivating patented seeds are considered to be licensees of a patented product and are not allowed to save, resow, exchange or sell the seeds bought from patent holders, thus depriving them of their so-called "farmers' rights", which used to be a part of traditional agriculture in many countries so far. IP protection for seeds under the International Convention for the Protection of New Varieties of Plants, in both its 1978 and 1991 versions, which is easier to attain than under patent law, constitutes "sui generis protection". Whereas the 1978 version of the Convention allows farmers to save, resow and exchange, but not sell seeds, the 1991 version effectively does away with "farmers' rights". Although commercial seed varieties may improve yields in the short term, other factors, such as the fact that these seeds are expensive (the market being dominated by a handful of companies), often only work in combination with equally expensive fertilisers and yet have not prevented bad harvests, have caused many farmers to become

⁴¹ See CESCR, General Comment No. 14, The Right to the Highest Attainable Standard of Health (Art. 12 ICESCR), UN Doc. E/2001/22, para. 12(a) and (b).

⁴² As at 29 July 2015, the amendment has not entered into force yet. In the interim, the General Council Decision of 30 August 2003 serves as the basis for the operation of the system referred to. ⁴³ Utilising the system covered by the TRIPS amendment entails cumbersome rules and procedures and heavily relies on the will of exporting countries. It has also been noted that, for many states, political reasons constitute a disincentive against using compulsory licenses or parallel imports. See R. Gupta (2010), Compulsory Licensing under TRIPS: How Far It Addresses Public Health Concerns in Developing Nations, 15 JIPR 2010, 359–360. See further D. Nicola & O. Owoeyea (2013), Using TRIPS Flexibilities to Facilitate Access to Medicines, 91 Bull. World Health Organ, 2013, 533–539.

⁴⁴ For a comprehensive treatment of the subject matter of TRIPS and the right to food, see H.M. Haugen (2007), The Right to Food and the TRIPS Agreement: With a Particular Emphasis on Developing Countries' Measures for Food Production and Distribution. Generally on the relationship between IP rights and the right to food, see L. Helfer & G.W. Austin (2011), Human Rights and Intellectual Property: Mapping the Global Interface, pp. 364–431.

financially ruined.⁴⁵ This, of course, poses a serious threat to food security and the realisation of the right to food.

A final example to be mentioned is that of conflict between copyright protection under the TRIPS Agreement and the right to education, as protected in Article 13 ICESCR. 46 Under the Covenant, compulsory education must be free of charge. Post-compulsory education must be made progressively free. 47 The requirement of "free education" also covers textbooks. 48 Many developing countries do, however, charge fees for textbooks in view of their often prohibitive cost. TRIPS essentially incorporates the Berne Convention for the Protection of Literary and Artistic Works of 1971 (excepting authors' moral rights), including its Appendix. The Appendix allows developing countries to adopt a compulsory licensing scheme limiting the rights of copyright holders to control reproduction and translation of their works. The Appendix has been a dismal failure, however. 49 This is a result of complex and onerous requirements associated with its use (waiting periods of up to 7 years, notification of the owner prior to issuing a licence, etc.). The Appendix further only envisages compulsory licences for domestic publication, but none for the publication of books in other countries for the purpose of importing them to the countries needing them.

The matter is complicated by the fact that human rights have been recognised with regard to IP rights themselves. It is important to understand their proper nature, though. Article 27(2) UDHR thus provides that "[e]veryone has the right to the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author". This provision has subsequently been given a legally binding form in Article 15(1)(c) ICESCR. Article 15(1) (c) states that "[t]he States Parties to the ... Covenant recognise the right of everyone ... [t]o benefit from the protection of the moral and material interests

⁴⁵ See O. De Schutter (2009), Interim Report of the Special Rapporteur on the Right to Food, The Right to Food – Seed Policies and the Right to Food: Enhancing Agrobiodiversity and Encouraging Innovation, UN Doc. A/64/170 of 23 July 2009, para. 24.

⁴⁶ For a comprehensive treatment of the subject matter of international copyright law and access to education in developing countries, see S.I. Štrba (2012), International Copyright Law and Access to Education in Developing Countries: Exploring Multilateral Legal and Quasi-Legal Solutions. Generally on the relationship between IP rights and the right to education, see L. Helfer & G.W. Austin (2011), Human Rights and Intellectual Property: Mapping the Global Interface, pp. 316–363.

⁴⁷ See Art. 13(2)(a), (b) and (c) ICESCR.

⁴⁸ See K.D. Beiter (2006), The Protection of the Right to Education by International Law: Including a Systematic Analysis of Article 13 of the International Covenant on Economic, Social and Cultural Rights, pp. 512–514, 589–590.

⁴⁹ See M. Chon (2007), Intellectual Property "from Below": Copyright and Capability for Education, 40 UC Davis L. Rev. 2007, 829. See also R.L. Okediji (2006), The International Copyright System: Limitations, Exceptions and Public Interest Considerations for Developing Countries, Issue Paper No. 15, ICTSD & UNCTAD, p. 29.

resulting from any scientific, literary or artistic production of which he is the author". 50

A number of observations should be made in this context to avoid any confusion. The right "to benefit from the protection of the moral and material interests resulting from any scientific, literary or artistic production of which one is the author" should not be equated with IP rights as such. As a human right, the former is of a fundamental nature in that it derives from "the inherent dignity and worth of all persons". 51 Inseparably linked, as it is, to human dignity, it is inalienable, thus "safeguard[ing] the personal link between authors and their creations". 52 IP rights. on the other hand, are "of a temporary nature, and can be revoked, licensed or assigned to someone else". 53 Whereas states install IP right systems in order "to provide incentives for inventiveness and creativity", 54 the right protected in Article 15(1)(c) serves a different purpose: "to encourage the active contribution of creators to the arts and sciences and to the progress of society as a whole", and, further, to assure creators a certain level of material well-being, consonant with the human right to an adequate standard of living within the meaning of Article 11(1) of the Covenant. The content of the right in Article 15(1)(c) is informed—and at the same time limited—by the other rights in Article 15, these being the right to "take part in cultural life" (Article 15(1)(a)), the right to "enjoy the benefits of scientific progress and its applications" (Article 15(1)(b)) and "the freedom indispensable for scientific research and creative activity" (Article 15(3)). 55 Important consequences flow from attributing a human rights character to the entitlement "to benefit from the protection of the moral and material interests resulting from any scientific, literary or artistic production of which one is the author". The CESCR, commenting on Article 15(1)(c), has thus stated that it "considers that only the 'author', namely the creator, whether man or woman, individual or group of individuals, of scientific, literary or artistic productions, such as, inter alia, writers and artists, can be the beneficiary of

⁵⁰ This right is also recognised in Art. 13(2) of the American Declaration of the Rights and Duties of Man of 1948 and Art. 14(1)(c) of the Additional Protocol to the American Convention on Human Rights in the Area of Economic, Social and Cultural Rights of 1988. It is not referred to in the African Charter on Human and Peoples' Rights of 1981 or, at the European level, in the Convention for the Protection of Human Rights and Fundamental Freedoms of 1950, as amended and supplemented by its various Protocols. For a thorough exposition of the drafting history of Art. 27(2) UDHR and Art. 15(1)(c) ICESCR, see P.K. Yu (2007), Reconceptualising Intellectual Property Interests in a Human Rights Framework, 40 UC Davis L. Rev. 2007, 1047–1075.

⁵¹ See CESCR, General Comment No. 17, The Right of Everyone to Benefit from the Protection of the Moral and Material Interests Resulting from any Scientific, Literary or Artistic Production of which he or she is the Author (Art. 15(1)(c) ICESCR), UN Doc. E/2006/22, para. 1.

⁵² Ibid., paras. 1 and 2.

⁵³ Ibid., para. 2.

⁵⁴ Ibid., paras. 1 and 2.

⁵⁵ Ibid., para. 4. See also A.R. Chapman (2009), Towards an Understanding of the Right to Enjoy the Benefits of Scientific Progress and Its Applications, 8 J. Hum. Rts. 2009, 1–36, who, at 19, points out that creators' rights not serving the function of promoting cultural freedom and participation in scientific progress are not covered under the Covenant.

the protection of [Article 15(1)(c)]", that "the drafters ... seemed to have believed authors of scientific, literary or artistic productions to be natural persons" and that, although "[u]nder the existing international treaty protection regimes, legal entities are included among the holders of intellectual property rights ... their entitlements, because of their different nature, are not protected at the level of human rights". This means that anybody to whom IP rights have been "licensed or assigned" does not enjoy protection under Article 15(1)(c). Likewise, corporate actors, i.e. those legal persons "doing big business" relying on IP rights, do not fall under the protective shield afforded by Article 15(1)(c). Furthermore, seeing that human rights are "fundamental, inalienable and universal entitlements", it is obvious that quite a number of IP rights, not being the product of any substantial creativity, do not come into consideration for protection under Article 15(1)(c). It may be doubted, therefore, whether claims relating to databases, trade marks or trade secrets should be elevated to human rights status. ⁵⁹

It is sometimes considered that IP rights should be held covered by the human right to property.⁶⁰ This is, for example, the approach followed by the European Court of Human Rights. In its decision in the case of *Anheuser-Busch Inc.*

⁵⁶CESCR, General Comment No. 17, The Right of Everyone to Benefit from the Protection of the Moral and Material Interests Resulting from any Scientific, Literary or Artistic Production of which he or she is the Author (Art. 15(1)(c) ICESCR), UN Doc. E/2006/22, para. 7.

⁵⁷ In this vein, see also P.K. Yu (2012), Intellectual Property and Human Rights in the Nonmultilateral Era, 4 Fla. L. Rev. 2012, 1066–1070.

⁵⁸ CESCR, General Comment No. 17, The Right of Everyone to Benefit from the Protection of the Moral and Material Interests Resulting from any Scientific, Literary or Artistic Production of which he or she is the Author (Art. 15(1)(c) ICESCR), UN Doc. E/2006/22, para. 1.

 $^{^{59}}$ See CESCR, Report on the 22^{nd} , 23^{rd} and 24^{th} Sessions, UN Doc. E/C.12/2000/21, paras 617 and 633.

⁶⁰There are differences between the right to hold intellectual property as part of the right to property and a right corresponding to that in Art. 15(1)(c) ICESCR. Whereas the former accrues to the holder of intellectual property, whoever that may be, the latter accrues solely to the creator thereof. Furthermore, the right to property does not encompass the creator's moral interests, as the moral interests seek to safeguard the personal link between creators and their creations. Moral interests are generally considered outside the coverage of the right to property. See P.K. Yu (2006– 2007), Ten Common Questions about Intellectual Property and Human Rights, 23 Ga. St. U. L. Rev. 2006–2007, 732. Moreover, the right in Art. 15(1)(c) covers only those economic interests that contribute to the enjoyment of the right to an adequate standard of living within the meaning of Art. 11(1) ICESCR (see CESCR, General Comment No. 17, The Right of Everyone to Benefit from the Protection of the Moral and Material Interests Resulting from any Scientific, Literary or Artistic Production of which he or she is the Author (Art. 15(1)(c) ICESCR), UN Doc. E/2006/22. para. 15), i.e. it "does not cover all forms of economic rights as protected in the existing intellectual property system, but rather the limited interests of authors and inventors in obtaining just remuneration for their intellectual labour" (see P.K. Yu (2006-2007), Ten Common Questions about Intellectual Property and Human Rights, 23 Ga. St. U. L. Rev. 2006-2007, 732). The right to property would cover all economic rights and interests. On all these issues, see also K.D. Beiter (2008), The Right to Property and the Protection of Interests in Intellectual Property: A Human Rights Perspective on the European Court of Human Rights' Decision in Anheuser-Busch Inc. v. Portugal, 39 IIC 2008, 714–721.

v. Portugal, 61 the Court thus embraced the view that Article 1 of Protocol No. 1 (1952) to the Convention for the Protection of Human Rights and Fundamental Freedoms (1950) on the protection of property is applicable to IP rights, including trade marks, and that it even covered an application for registration of a trade mark. 62 It may be noted that Article 1 may even be invoked by a legal person, as was, in fact, the case in Anheuser-Busch. 63 Accepting for the moment that property should be protected as a human right, is the concept of "property" wide enough to included IP rights? Property, at the human rights level, does not have the rather restricted meaning it has in private law, where the term is commonly associated with tangible things. It rather means any aspect of one's patrimony or, as has been stated, any "vested right". 64 In this sense then, "property" is wide enough a concept to encompass IP rights. 65 There is a problem of a different calibre, though. One of the arguments raised against according human rights status to property relates to the issue of legitimacy. With regard to physical property, the problem concerns the often questionable conditions under which especially land has been acquired, often centuries

⁶¹ Anheuser-Busch Inc. v. Portugal [GC], No. 73049/01, ECHR 2007-I.

⁶² Article 1 of Protocol to the Convention for the Protection of Human Rights and Fundamental Freedoms of 1952 (ETS No. 009, entry into force on 18 May 1954) states: "(1) Every natural or legal person is entitled to the peaceful enjoyment of his possessions. No one shall be deprived of his possessions except in the public interest and subject to the conditions provided for by law and by the general principles of international law. (2) The preceding provisions shall not, however, in any way impair the right of a State to enforce such laws as it deems necessary to control the use of property in accordance with the general interest or to secure the payment of taxes or other contributions or penalties." The right to property is protected in Art. 17 UDHR, but not in the ICCPR or the ICESCR. It is protected in Art. 21 of the American Convention on Human Rights (1969) and Art. 14 of the African Charter on Human and Peoples' Rights (1981).

⁶³ As has been pointed out above, human rights should be held to apply to human beings only. For a discussion of the case, see K.D. Beiter (2008), The Right to Property and the Protection of Interests in Intellectual Property: A Human Rights Perspective on the European Court of Human Rights' Decision in Anheuser-Busch Inc. v. Portugal, 39 IIC 2008, 714–721. See also L. Helfer (2008), The New Innovation Frontier? Intellectual Property and the European Court of Human Rights, in P.L.C. Torremans (Ed.), Intellectual Property and Human Rights: Enhanced Edition of Copyright and Human Rights, specifically at pp. 43–51. It may be noted that the second paragraph of Art. 17 on the right to property of the Charter of Fundamental Rights of the European Union (OJ C 303/1 of 14 December 2007) states that "[i]ntellectual property shall be protected". The official explanations to the Charter emphasise that "[i]ntellectual property covers not only literary and artistic property but also *inter alia* patent and trademark rights and associated rights". Art. 17 also applies to legal persons. See Explanations Relating to the Charter of Fundamental Rights (OJ C 303/17 of 14 December 2007), Explanation on Art. 17. The explanations are not legally binding.

⁶⁴ See T.R.G. Van Banning (2002), The Human Right to Property, pp. 11–12.

⁶⁵ This is not to say, of course, that IP rights relate to "intellectual property" in the form of intangible goods. There is no "intellectual property" that can be owned. IP rights are best understood as exclusionary rights, i.e. a bundle of entitlements in terms of which others may be excluded from exploiting one's patent, work or trade mark. See J.E. Penner (1997), The Idea of Property in Law, who uses the term "right to a monopoly" in this respect.

ago. ⁶⁶ In the case of IP rights, there is a legitimacy problem too—at another level, but perhaps far more serious. "Modern" IP protection has become far removed, on the one hand, from its function of ensuring innovation by guaranteeing the proper functioning of an equitable system of competition and, on the other, its social (or human rights-related) function as reflected in Article 15 and other relevant provisions of the ICESCR. Overprotection and a lack of balance prevail in current IP law. IP protection under TRIPS extends to all subject matter, and limitations "necessary to protect public health and nutrition, and to promote the public interest in sectors of vital importance to . . . socio-economic and technological development" must be "consistent with the provisions of [TRIPS]", ⁶⁷ which has increasingly become construed as meaning that "the widest possible measure of IP protection" is to be achieved. ⁶⁸ A matter of great concern in the last couple of years has further been the proliferation of so-called TRIPS-plus agreements, concluded between two or a handful of states and seeking to achieve enhanced levels of trade liberalisation and IP protection for the states concerned.

Accordingly, to consider IP rights to be covered under the human right to property may be sound from a very theoretical point of view. In practice, however, in the light of the legitimacy crisis in which IP law finds itself, doing so is dangerous. It may entail opening Pandora's box and constitutionally entrenching "a skewed system" of overprotection and lack of balance of IP rights to the detriment of other important human rights goals. Returning to Article 1 of Protocol No. 1 to the European Convention on Human Rights, one should agree with Laurence Helfer, where he holds that, in future, the European Court of Human Rights should use Article 1 only to offer protection against arbitrary deprivation of IP rights (rule of law paradigm), but not to discover positive obligations of the state to provide IP protection (enforcement paradigm) and also not in any attempt at balancing

⁶⁶ See T.R.G. Van Banning (2002), The Human Right to Property, pp. 179–180. See also J. Nedelsky (1996), Should Property be Constitutionalised? A Relational and Comparative Approach, in G.E. Van Maanen & A.J. Van der Walt (Eds.), Property Law on the Threshold of the 21st Century, pp. 417–432.

⁶⁷ See Art. 8(1) TRIPS.

⁶⁸ No enlightened IP law expert would today query the reality of overprotection and lack of balance in IP law. To mention just the case of patent law under TRIPS as this affects access to essential medicines: Art. 27(1) provides that "patents shall be available for any inventions, whether products or processes, in all fields of technology". WTO members cannot, therefore, exclude pharmaceuticals from patent protection or determine the level of protection they wish to accord to them, as they used to be able to do prior to TRIPS. Patent protection is to last for 20 years (Art. 33 TRIPS), in circumstances in which costs expended are often recouped during the first few months of bringing a product on the market. The pharmaceutical industry has thus created the magic figure of one billion USD as being the costs entailed to bring a pharmaceutical substance on the market. Enquiry has shown that the costs usually lie at less than ten percent of the amount indicated. See H. Koberstein, D. Nowak & A. Randerath (2013), Frontal 21, manuscript, contribution: Überteuerte Medikamente: Die Ausrede der Pharmaindustrie, broadcast on ZDF (Zweites Deutsches Fernsehen) on 30 April 2013. In the light of the fact that "bad patents" are being granted for pharmaceuticals by way of "evergreening" in many jurisdictions, the problem of access to affordable medicines is aggravated even further.

various rights provisions (IP balancing paradigm).⁶⁹ Balancing IP claims under the right to property with other Convention provisions is highly undesirable seeing that the European Convention does not contain social and cultural rights provisions. In particular, there is also no immediate counterpoise to creators' rights, as found in Article 15 (1)(a) and (b) ICESCR, protecting everybody's rights "to take part in cultural life" and "to enjoy the benefits of scientific progress and its applications". As has been mentioned, the UN Human Rights Covenants do not contain any provisions on the right to property—fortunately, one might perhaps say, as problems flowing from considering IP rights being covered by the right to property cannot, therefore, arise in this context.

Consequently, it will always be important to ascertain whether IP rights do have a backing in human rights or not. It has been stated that "[w]hile the two sets of rights can coincide in theory, they are likely to diverge in practice today, given the high level of protection in the existing intellectual property system and the system's continuous expansion at the expense of human rights protection". Leaving arbitrary deprivation of IP rights aside, it is probably not more than 10 % of IP rights that do have a human rights basis. It is only with regard to these 10 % that, in cases of conflict, a genuine "balancing of human rights" may take place. In all other instances of conflict, it will be a question of whether IP rights as "external considerations" may legitimately restrict human rights. 71

3 Human Rights Obligations of the WTO as an International Organisation

The question whether the World Bank and the International Monetary Fund are the bearers of obligations under IHRL was dealt with for the first time in 2001 in a book by Sigrun Skogly, entitled *The Human Rights Obligations of the World Bank and the International Monetary Fund.* Skogly concluded in her book that both World Bank and IMF, neither of which has a human rights mandate in terms of its constitution, had obligations *to respect*, in certain cases *to protect*, but generally not *to fulfil* human rights. The notion that all human rights, whether civil,

⁶⁹ See L. Helfer (2008), The New Innovation Frontier? Intellectual Property and the European Court of Human Rights, in P.L.C. Torremans (Ed.), Intellectual Property and Human Rights: Enhanced Edition of Copyright and Human Rights, pp. 35–52.

 $^{^{70}\,\}mathrm{See}$ P.K. Yu (2007), Reconceptualising Intellectual Property Interests in a Human Rights Framework, 40 UC Davis L. Rev. 2007, 1079–1080.

⁷¹ The description of conflicts in this context as "external" or "internal" has notably been made by P.K. Yu (2012), Intellectual Property and Human Rights in the Nonmultilateral Era, 4 Fla. L. Rev. 2012, 1091–1096.

 $^{^{72}}$ See S.I. Skogly (2001), The Human Rights Obligations of the World Bank and the International Monetary Fund.

⁷³ Ibid. at p. 193 and chapter 7 at pp. 147–174. To the same effect, see A. McBeth (2010), International Economic Actors and Human Rights, p. 329.

political, economic, social or cultural, entail obligations for states at these three levels has long since been accepted in IHRL.⁷⁴ Obligations to respect require refraining from interfering with the enjoyment of human rights, obligations to protect preventing violations of such rights by third parties and obligations to fulfil that appropriate legislative, administrative, budgetary, judicial and other measures directed towards the full realisation of such rights be taken.⁷⁵ The basis for deducing human rights obligations for World Bank and IMF, Skogly held, had to be found in Article 63 UN Charter. This provides for relationship agreements to be concluded between "the various specialised agencies ... having wide international responsibilities, as defined in their basic instruments, in economic, social, cultural, educational, health, and related fields" and the UN Economic and Social Council. ⁷⁶ Premised on Article 63, the UN has concluded such agreements with many "specialised agencies", including the World Bank and the IMF. Skogly considers that this special relationship with the UN triggers an obligation to respect the principles of the UN Charter, one of these being respect for human rights as provided for in Article 1(3) of the Charter. The may be asked whether the above argument may likewise be applied to the WTO, which, in terms of its various "constitutional documents", including TRIPS, has not been accorded any human rights mandate. What distinguishes the WTO from the World Bank and the IMF is that it is not a "specialised agency" within the meaning of Article 57 read with Article 63 UN Charter. In other words, it is not a part of the "UN family", no relationship agreement establishing institutional ties having been concluded between the UN and the WTO.⁷⁸ It is difficult, therefore, on this basis, to hold the WTO to be bound to observe human rights in accordance with the UN Charter. 79

⁷⁴ For a history of and more detail on the tripartite typology of state obligations in IHRL, see, e.g., K. Arambulo (1999), Strengthening the Supervision of the International Covenant on Economic, Social and Cultural Rights: Theoretical and Procedural Aspects, pp. 114–129.

⁷⁵ The definitions used here are based on para. 6 of the Maastricht Guidelines on Violations of Economic, Social and Cultural Rights of 1997, a document prepared by a group of experts on ESCR. The Guidelines have been published in (1998) 20 Hum. Rts. Q. 1998, 691–704.

⁷⁶ Art. 63 UN Charter needs to be read together with Art. 57 UN Charter, both provisions using the phrase that the "specialised agencies" "shall be brought into relationship with the United Nations".

⁷⁷ Art. 1(3) UN Charter provides as follows: "The Purposes of the United Nations are: ... To achieve international cooperation ... in promoting and encouraging respect for human rights and for fundamental freedoms for all without distinction as to race, sex, language, or religion".

⁷⁸ See P. Van den Bossche & W. Zdouc (2013), The Law and Policy of the World Trade Organisation: Text, Cases and Materials, p. 149.

⁷⁹ WTO-UN relations are governed by the "Arrangements for Effective Cooperation with other Intergovernmental Organisations – Relations between the WTO and the United Nations", dated 15 November 1995 (contained in WT/GC/W/10 of 3 November 1995). These incorporate "arrangements and practices" as described in UN General Assembly document of 9 March 1976 (A/AC.179/5), which provide, for instance, for exchange of information and documents, reciprocal representation and cooperation between secretariats, but notably also for "[WTO members]... to follow decisions of the United Nations on [essentially political] questions" (see the heading "Resolutions of the United Nations"). One may thus sense a certain degree of subordination to important UN policy, though it is not clear whether this includes an acceptance by the WTO to

On 28 September 2011, at a gathering convened by Maastricht University and the International Commission of Jurists, a group of experts in international law adopted the Maastricht Principles on Extraterritorial Obligations of States in the Area of Economic, Social and Cultural Rights. Applicable to the acts of states which have repercussions on the protection of ESCR beyond their respective national territories, the principles aim to clarify the content of obligations with regard to ESCR in respect of such acts precipitating "extraterritorial effects". Principle 16 states:

The present Principles apply to States without excluding their applicability to the human rights obligations of international organisations under, *inter alia*, general international law and international agreements to which they are parties.

The Commentary to the Maastricht Principles, addressing Principle 16, emphasises that international organisations are bound "by any obligations incumbent upon them under general rules of international law, under their constitutions or under international agreements to which they are parties". As it is rather difficult to uphold the argument to the effect that the WTO should be held bound by human rights forming part of the UN system in view of "WTO-UN relations"—which, in a way, would make human rights part of the WTO constitution—then, in the absence of any international human rights agreement to which the WTO is (and can be) a party, it remains to consider whether the WTO is obliged to respect human rights under "general rules of international law". The Commentary goes on elaborating on the notion of "general rules of international law". These cover "a wide range of human rights [that] has acquired a customary status in international law".

respect at least core human rights forming part of the UN system. Interestingly, the CESCR, in its General Comment No. 14, The Right to the Highest Attainable Standard of Health (Art. 12 ICESCR), UN Doc. E/2001/22, at para. 64, under the heading "Obligations of actors other than states parties" – and referring to Arts. 22 and 23 ICESCR (which are directed at UN organs and "specialised agencies") – mentions the WTO together with other international bodies, essentially bodies "within the United Nations system", as the bearer of obligations, stating that these bodies "should cooperate effectively with States parties . . . in relation to the implementation of the right to health at the national level".

⁸⁰ See O. De Schutter et al. (2012), Commentary to the Maastricht Principles on Extraterritorial Obligations of States in the Area of Economic, Social and Cultural Rights, 34 Hum. Rts. Q. 2012, 1084–1169, for a reproduction of and commentary to the Maastricht Principles.

⁸¹ Ibid., 1121.

⁸² The authoritative commentary on the UN Charter stresses that "the principles of Arts. 1 and 2 [UN Charter], namely justice and international law, self-determination, as well as human rights and fundamental freedoms, constitute an expression of general international law that also binds international organisations". See A. Paulus & L. Leiß (2012), in B. Simma et al. (Eds.), The Charter of the United Nations: A Commentary, Vol. II, Article 103, para. 59, pp. 2130–2131.

⁸³ See O. De Schutter et al. (2012), Commentary to the Maastricht Principles on Extraterritorial Obligations of States in the Area of Economic, Social and Cultural Rights, 34 Hum. Rts. Q. 2012, 1121. International organisations are generally bound to observe customary international law. See H.G. Schermers (1998), The Legal Bases of International Organisation Action, in R.J. Dupuy (Ed.), A Handbook on International Organisations, p. 402. A WTO panel, in the case of Panel

further the various "[h]uman rights ... [forming] part of the 'general principles of law recognised by civilised nations' within the meaning of Article 38(1)(c) of the Statute of the International Court of Justice". Statute to the International Court of Justice". It has thus been held with regard to ESCR, the category of human rights particularly prone to be violated under TRIPS, that "at least some elements" of the rights to work, just and favourable conditions of employment, a decent standard of living, freedom from hunger, health and education constitute customary law, contending that "there is sufficient evidence of State practice and an apparent feeling of compulsion among States to provide the basic needs that comprise the right to a decent standard of living, freedom from hunger, the right to health and the right to education for those rights to be considered customary international law". At any rate, "essential levels" of the rights concerned would have to be regarded as "general principles of law recognised by civilised nations". The WTO would at least have an obligation to respect ESCR in as far as they formed part of customary law or the general principles of law. The work is a far as they formed part of customary law or the general principles of law.

Report, Korea – Measures Affecting Government Procurement, WT/DS163/R, adopted 19 June 2000, DSR 2000:VIII, p. 3541, stated at para. 7.96: "We take note that Article 3(2) of the DSU requires that we seek within the context of a particular dispute to clarify the existing provisions of the WTO agreements in accordance with customary international law rules of interpretation of public international law. However, the relationship of the WTO agreements to customary international law is broader than this. Customary international law applies generally to the economic relations between WTO members. Such international law applies to the extent that the WTO treaty agreements do not 'contract out' from it. To put it another way, to the extent that there is no conflict or inconsistency, or an expression in a covered WTO agreement that applies differently, we are of the view that the customary rules of international law apply to the WTO treaties and to the process of treaty formation under the WTO". It should be noted, however, that the statement cannot be read to imply that hierarchically superior customary international law can be contracted out of. See the discussion in Sect. 5 below.

⁸⁴ See O. De Schutter et al. (2012), Commentary to the Maastricht Principles on Extraterritorial Obligations of States in the Area of Economic, Social and Cultural Rights, 34 Hum. Rts. Q. 2012, 1121. On human rights as part of the "general principles of law recognised by civilised nations", see B. Simma & P. Alston (1988–1989), The Sources of Human Rights Law: Custom, Jus Cogens, and General Principles, 12 Australian Yb. Int'l L. 1988–1989, 82–108. The authors convincingly argue that many of the rights considered to form part of customary law do not, in fact, qualify as such, as the element of state practice is lacking. They contend, however, that many of the rights concerned are general principles of law. They say, at 105, "[w]hat is required for the establishment of human rights obligations *qua* general principles is essentially the same kind of convincing evidence of general acceptance and recognition that [is usually asked for] in order to arrive at customary law. However, this material is not equated with State practice but is rather seen as a variety of ways in which moral and humanitarian considerations find a more direct and spontaneous 'expression in legal form'".

⁸⁵ See A. McBeth (2010), International Economic Actors and Human Rights, who, at pp. 40–41, compiles an inventory of civil, political, economic, social and cultural rights that, in his view, form part of customary law.

⁸⁶ Ibid., p. 37.

⁸⁷ It has been pointed out that "[r]eiterating that the WTO, as an inter-governmental non-state actor, is bound by international human rights law may help to reorientate the debate away from the misleading suggestion that introducing the human rights dimension is part of a demand for the

It has been argued that, concerning the WTO, it is not necessary to conclude that the institution itself, as an international legal person, has its own obligations under IHRL, as the member states that comprise the WTO certainly have human rights obligations. It has, however, also been observed that the WTO, as such, has "sufficient international personality" to be bound by IHRL, as "[a]t a certain point, it is the WTO itself that acts, for example, through entering into a treaty with the World Bank or advising a government through training programmes". One could add that the WTO's Appellate Body is composed of independent legal experts, not government representatives, i.e. it is a WTO body clearly separate from member states. For it to have obligations under IHRL, with implications for its decision-making, the WTO, as such, would have to be bound by IHRL.

4 Extraterritorial Human Rights Obligations of WTO Members

If it has been shown that the WTO, as an international organisation, does have human rights obligations under IHRL—primarily in the nature of (negative) obligations to respect rather than in the form of (positive) obligations to fulfil—a question at another level is whether WTO members do not simultaneously, as individual states, assume a duty to comply with obligations binding on them under IHRL, when taking action in a WTO (or TRIPS) context.

Principle 15 of the Maastricht Principles on Extraterritorial Obligations of States in the Area of Economic, Social and Cultural Rights⁹⁰ addresses the "Obligations of States as members of international organisations". It states:

As a member of an international organisation, the State remains responsible for its own conduct in relation to its human rights obligations within its territory and extraterritorially. A State that transfers competences to, or participates in, an international organisation must take all reasonable steps to ensure that the relevant organisation acts consistently with the international human rights obligations of that State.

The Maastricht Principles were adopted to clarify that—apart from their obligations to respect, protect and fulfil human rights binding on them under IHRL, where their conduct affects the rights of individuals domestically—states also assume a duty to comply with human rights at all three levels when their action, including that within international organisations, may affect the rights of those in foreign jurisdictions

WTO to enforce human rights. Focusing on the WTO as the bearer of international human rights obligations may help to highlight the issue of the human rights impact of the WTO, its rules, and the decisions of its dispute settlement mechanism". See A. Clapham (2006), Human Rights Obligations of Non-State Actors, p. 177.

⁸⁸ See A. McBeth (2010), International Economic Actors and Human Rights, p. 328.

⁸⁹ Ibid

⁹⁰ See fn. 80 above.

(extraterritorial obligations).⁹¹ Whereas the first sentence of Principle 15 seeks to express that a state, as a member of an international organisation, must take "all reasonable steps to ensure that, in its decision-making processes, the international organisation acts in accordance with the pre-existing human rights obligations of the state concerned",⁹² the second deals with the actual establishment of international organisations and the transfer of powers by states to such organisations, highlighting that "[e]ach state has a duty to ensure that the international organisation which the state establishes or of which it becomes a member complies with the pre-existing human rights obligations of that state in the exercise of the powers that organisation has been delegated".⁹³

The former establishes an obligation of result (i.e. not a "mere" obligation of conduct)⁹⁴ to the effect that states need to ensure that their actions as members of international organisations—and thus also as members of the WTO—take due account of, for example, the right to health, the right to food or the right to education. The CESCR has made this point clear with regard to various ESCR. In its General Comment No. 14 on the Right to Health, the Committee, under the heading "International obligations", stresses, for example, that "... States parties have an obligation to ensure that their actions as members of international organisations take due account of the right to health". 95 The second sentence of Principle 15 seeks to make two things clear: On the one hand, states, when creating an international organisation and transferring powers to that organisation, are obliged to ensure that the legal regime they set up, in its structures, competences and procedures, does not conflict with their obligations under IHRL. On the other hand, a state may only join an international organisation, if the latter is able to act in accordance with human rights obligations binding on the state concerned, alternatively, if that state can guarantee that it will be able to act in accordance with such obligations within the organisation once it is a member thereof.⁹⁶

⁹¹ For the exact meaning of the term "extraterritorial obligations" in the Maastricht Principles, see fn. 174 below. The Maastricht Principles stress that they "elaborate extraterritorial obligations in relation to economic, social and cultural rights, without excluding their applicability to other human rights, including civil and political rights" (Principle 5).

⁹² See O. De Schutter et al. (2012), Commentary to the Maastricht Principles on Extraterritorial Obligations of States in the Area of Economic, Social and Cultural Rights, 34 Hum. Rts. Q. 2012, 1118–1119.

⁹³ Ibid., 1119.

⁹⁴On the distinction between obligations of result and obligations of conduct, see fn. 28 above.

⁹⁵ See CESCR, General Comment No. 14, The Right to the Highest Attainable Standard of Health (Art. 12 ICESCR), UN Doc. E/2001/22, para. 39. See also CESCR, General Comment No. 13, The Right to Education (Art. 13 ICESCR), UN Doc. E/2000/22, para. 56, stating that "...States parties have an obligation to ensure that their actions as members of international organisations, including international financial institutions, take due account of the right to education".

⁹⁶ Art. 61(1) of the Draft Articles on the Responsibility of International Organisations, as adopted by the International Law Commission on 3 June 2011 – Art. 61 being entitled "Circumvention of international obligations of a State member of an international organisation" – provides that "[a] State member of an international organisation incurs international responsibility if, by taking

Another important principle of the Maastricht Principles is Principle 17. This states:

States must elaborate, interpret and apply relevant international agreements and standards in a manner consistent with their human rights obligations. Such obligations include those pertaining to international trade, investment, finance, taxation, environmental protection, development cooperation, and security.

The principle "reflects the requirement that any agreements reached by a state are consistent with the state's pre-existing international human rights obligations, in order to reduce the risks associated with the fragmentation of international law and the emergence of conflicting obligations and in order to ensure the primacy of human rights" and "recalls that human rights obligations are intended to be respected in all situations by all UN member states, even in situations where they cooperate in other regimes than the international human rights regime". 97 Principle 17 applies with regard to the various WTO instruments, including TRIPS, but naturally also with regard to any other trade agreement concluded between two or more states, including any TRIPS-plus agreements. The elaboration (including the negotiation process) of trade agreements, their interpretation (notably in dispute settlement procedures) and any application of these agreements (for instance, through the adoption of specific measures, giving effect to the content of the relevant agreement) need to respect relevant human rights considerations. 98 A UN expert has thus held that prior to and following the conclusion of trade agreements, states were required to subject these to a human rights impact assessment. Where, based on the assessment, an incompatibility was found, the agreement should be amended or terminated, safeguards be inserted in the agreement, compensation be provided to third state parties or mitigation measures be adopted. 99 He adds that "a right of denunciation or withdrawal may be implied in any trade ... agreement to the extent necessary for a State to comply with its human rights obligations, even in the absence of ... an explicit clause [to this effect]", as "human rights obligations prevail over other treaty obligations". 100

Quite certainly, WTO members have obligations under IHRL. They should take due account of these when negotiating and implementing trade rules under the

advantage of the fact that the organisation has competence in relation to the subject-matter of one of the State's international obligations, it circumvents that obligation by causing the organisation to commit an act that, if committed by the State, would have constituted a breach of the obligation". See Responsibility of International Organisations, adopted by Drafting Committee, UN GAOR, International Law Commission, UN Doc. A/CN.4/L.778 of 2011.

⁹⁷ See O. De Schutter et al. (2012), Commentary to the Maastricht Principles on Extraterritorial Obligations of States in the Area of Economic, Social and Cultural Rights, 34 Hum. Rts. Q. 2012 at 1122 and 1123, respectively.

⁹⁸ Ibid., 1123.

⁹⁹ See Report of the Special Rapporteur on the Right to Food, O. De Schutter, Addendum, Guiding Principles on Human Rights Impact Assessments of Trade and Investment Agreements, UN Doc. A/HRC/19/59/Add.5 of 19 December 2011, para. 3.

¹⁰⁰ Ibid., para, 3.3.

auspices of the WTO. Moreover, when interpreting and applying WTO law, for example in the WTO Dispute Settlement Body, members of the WTO should do so "in a manner that is consistent with [their] human rights obligations ... and that recognises the central place of human rights in international law". Particularly as regards the obligation to only establish or participate in an international organisation where "all reasonable steps" have been taken to ensure that the organisation acts consistently with pre-existing human rights obligations, it may well be asked whether, in view of the lack of a human rights approach in the design and content of the TRIPS Agreement—human rights concerns having been relegated to narrow exceptions to proprietary interests 102—states, by having ratified the WTO Agreement and its annexures (GATT, GATS and TRIPS), have not already violated obligations under IHRL. International responsibility for such a violation would entail, at a minimum, a duty of WTO members to initiate and take measures, such as adopting interpretative guidelines or amending the text of TRIPS, aimed at rectifying deficits in this regard.

5 Resolving Conflicts: Hierarchy in International Law

Whenever conflicts exist between a treaty and other norms of international law—including conflicts between obligations under TRIPS (or TRIPS-plus agreements) and those under IHRL—the attempt must be, first of all, to try and resolve these by way of a "harmonious interpretation" of the norms concerned (principle of "systemic integration"). Where, however, this proves difficult, the question of hierarchy in international law becomes relevant. ¹⁰³

The orthodox approach is to say that there exists no formal hierarchy of norms in international law—the only exception, so it is said, being that "peremptory norms", making up *ius cogens*, enjoy precedence over other rules of international law. In an attempt then of justifying that human rights obligations should trump contradictory norms emanating from other bodies of international law, the category of *ius cogens* has become inflated in theory to an extent not reflected by the essential character of *ius cogens*. In the practice of the courts, however, *ius cogens* has for a long time been "the vehicle [that] does not often leave the garage", 105 with more references to

¹⁰¹ See A. McBeth (2010), International Economic Actors and Human Rights, p. 328.

¹⁰² See Sect. 2 above.

¹⁰³ On the principle of "systemic integration" as articulated in Art. 31(3)(c) Vienna Convention on the Law of Treaties of 1969 and conflict-resolution rules in international law (specificity, temporality and status), see Sect. 6.3 below.

¹⁰⁴ There exists such a vast body of literature on the topic of *ius cogens* that it will be refrained from providing any list of relevant publications here.

¹⁰⁵ See I. Brownlie (1988), Discussion Statement, in A. Cassese & J. Weiler (Eds.), Change and Stability in International Law-Making, p. 110, quoted in A. Paulus (2005), *Jus Cogens* in a Time of Hegemony and Fragmentation: An Attempt at a Re-Appraisal, 74 Nord. J. Int'l L. 2005, 330.

peremptory norms featuring only in case law as from the late 1990s. 106 Where the courts do rely on *ius cogens*, their practice generally is to declare that a rule constitutes ius cogens without engaging in any systematic analysis as to whether or not the rule is accepted as ius cogens by a large majority of states, often seemingly relying on natural law notions as justification for a norm qualifying as peremptory in nature. ¹⁰⁷ The concept of *ius cogens* has its basis in Article 53 of the Vienna Convention on the Law of Treaties of 1969. This provides that a treaty "[will be] void if, at the time of its conclusion, it conflicts with a peremptory norm of general international law", a peremptory norm being one that is "accepted and recognised by the international community of States as a whole as a norm from which no derogation is permitted and which can be modified only by a subsequent norm of general international law having the same character". If it is not the treaty, but the execution of an obligation that would conflict with a peremptory norm, the treaty will not be void, but the obligation concerned will fall away. 108 It may be noted that, in practice, it is often not treaties or the execution of treaty obligations, but the acts of states that constitute a threat to *ius cogens*. ¹⁰⁹ Peremptory norms also cover—if one considers only those norms to constitute *ius cogens* that are genuinely accepted as such by a large majority of states—a rather limited number of rights protecting life and physical integrity. Although there exist clear links between the right to life and the rights to food or health as ESCR (rights, whose protection is threatened under TRIPS), these are not considered to constitute ius cogens. ¹¹⁰ In view

¹⁰⁶ See the examples provided by E. De Wet (2013), *Jus Cogens* and Obligations *Erga Omnes*, in D. Shelton (Ed.), The Oxford Handbook on International Human Rights Law, pp. 543–547.

¹⁰⁸ Ibid., p. 548. In the case of TRIPS, e.g., possible conflicts would usually only arise in the context of the specific execution of what are ordinarily rather broadly formulated treaty obligations.

¹⁰⁹ Ibid., pp. 548–549. It is not quite clear whether the concept of *ius cogens* would be applicable to acts of states. For a discussion of whether the scope of application of *ius cogens* should also be considered to extend to unilateral acts, see I.D. Seiderman (2001), Hierarchy in International Law: The Human Rights Dimension, pp. 56–59.

¹¹⁰ The perhaps most thorough treatment of the subject so far concludes that, "[w]hile the identification of jus cogens in the human rights has never approached an international consensus, it is possible to extract a minimum core by reference to analogous non-derogable treaty rights, international criminal law, and judicial and scholarly pronouncements. Thus, safely included among these peremptory norms are: the right to life, including the prohibitions against genocide, summary and extra-judicial executions and the application of the death penalty to juveniles and the prohibitions on torture; cruel, inhuman and degrading treatment or punishment; arbitrary detention; disappearances; racial and other forms of discrimination; slavery and the slave trade; and criminal violations of humanitarian law, including crimes against humanity and some war crimes. International legal protagonists seemed to have invoked as jus cogens economic[,] social and cultural rights and so-called third generation rights only rarely." See I.D. Seiderman (2001), Hierarchy in International Law: The Human Rights Dimension, p. 121. Practice reveals further that peremptory norms (appear to) merely operate in a negative fashion (up to now), i.e. they only (seem to) imply obligations to refrain from certain types of conduct. For a discussion of the issue, see J. Vidmar (2012), Norm Conflict and Hierarchy in International Law: Towards a Vertical International Legal System?, in E. De Wet & J. Vidmar (Eds.), Hierarchy in International Law: The Place of Human Rights, pp. 35–38.

of the conceptual ambiguities regarding *ius cogens* and the fact that "the overall use [thereof] in international practice continues to be diffuse and erratic", ¹¹¹ it may well be asked: What is, then, the value of *ius cogens*? It has thus been stated that the concept "may... provide the necessary value glue to the inevitable functional differentiation of international governance regimes". ¹¹² *Ius cogens* could, therefore, be seen to point to the existence of certain common values of the international community which provide guideposts for or may impose limits on the law. Elsewhere, with *ius cogens* and obligations *erga omnes* in mind, it has been observed:

...[T]here is already some evidence of a hierarchically superior international value system ...¹¹³ The fundamental substantive elements of the international constitutional order primarily include the value system of the international legal order, meaning norms of positive law with a strong ethical underpinning (notably human rights norms) that have acquired a special hierarchical standing vis-a-vis other international norms through state practice. ¹¹⁴

And Martti Koskenniemi, commenting for the International Law Commission in its report on the Fragmentation of International Law, holds that

[a]lthough there is no single, fixed set of hierarchical relationships between the rules, principles and obligations of international law, this does not mean that relations of superiority and inferiority would be non-existent, only that what they are, cannot be determined in an abstract way, irrespective of the contexts in which some norms (rules, principles) are invoked against countervailing considerations. Although it is customary to deal with hierarchy in international law in terms of *jus cogens* norms and *erga omnes* obligations, it is not clear that those are the only – or indeed the practically most relevant – cases. . . . there are other important rules – for example treaty rules of "integral" and "interdependent" nature, "intransgressible principles", "elementary considerations of humanity" and treaty clauses that cannot be violated without simultaneously undermining the object and purpose of the treaty – that play a more significant role in the practice of legal reasoning. ¹¹⁵

In accordance with these views, hierarchy *does* exist in international law: It may be of a more restrained nature, entailing a minimum of common values at the apex,

¹¹¹See I.D. Seiderman (2001), Hierarchy in International Law: The Human Rights Dimension, p. 121.

¹¹² See A. Paulus (2005), *Jus Cogens* in a Time of Hegemony and Fragmentation: An Attempt at a Re-Appraisal, 74 Nord. J. Int'l L. 2005, 332. In the same vein, see M. Petsche (2010), *Jus Cogens* as a Vision of the International Legal Order, 29 Penn St. Int'l L. Rev. 2010, 233–273.

¹¹³ See E. De Wet (2007), The Emerging International Constitutional Order: The Implications of Hierarchy in International Law for the Coherence and Legitimacy of International Decision-Making, 2 Potchefstroom Electronic Law Journal 2007, 3/27.

¹¹⁴ Ibid., 16/27. Elsewhere it has been stated that "[the] primacy of human rights law over all other regimes of international law is a basic and fundamental principle that should not be departed from". See J. Oloka-Onyango & D. Udagama (2000), Report of the Special Rapporteurs of the (then) UN Sub-Commission on Human Rights on Globalisation and Its Impact on the Full Enjoyment of Human Rights, UN Doc. E/CN.4/Sub.2/2000/13, para. 63.

¹¹⁵ M. Koskenniemi (2006), Fragmentation of International Law: Difficulties Arising from the Diversification and Expansion of International Law, Report of the Study Group of the International Law Commission, UN Doc. A/CN.4/L.682 of 13 April 2006, para. 407.

but it may also be more comprehensive in scope. There may be a fixed set of hierarchical relationships, but the latter could also be more flexible in character. Hierarchy may primarily relate to values or principles, but could also refer to norms.

For purposes of the discussion it will be accepted that, whenever a conflict between TRIPS and IHRL needs to be resolved, there may be hierarchies of various sorts that would have to be taken into account in arriving at a solution. Hierarchy thus arises from *ius cogens*. A treaty provision that does not comply with peremptory norms is void. Another source of hierarchy are obligations erga omnes. The concept was introduced into positive law by the International Court of Justice in the Barcelona Traction case in 1970. 116 Obligations erga omnes are obligations of such importance that they are owed to a group of states (erga omnes partes) or indeed to the international community as a whole (erga omnes). As opposed to bilateral obligations, where the performance of the obligation involves two individual states (even if under a multilateral treaty), obligations erga omnes are of a collective interest nature. Whereas qualifying an obligation as peremptory relates to its normative quality, describing it as being owed erga omnes signifies a procedural characteristic, namely that all other states implicated have a legal interest in enforcing that norm. Even so, the latter procedural characteristic signifies that the obligations concerned "are thereby endowed with enhanced normative force". 117 The obligations in human rights treaties are generally considered to have erga omnes effect—erga omnes partes towards other states parties and erga omnes to the extent that they have acquired customary law status. ¹¹⁸ Obligations of an *ius cogens* nature are simultaneously owed *erga omnes*. Not all obligations owed *erga omnes* are, however, of a peremptory character. To the extent, therefore, that ESCR in international law give rise to obligations erga omnes, these would have to be considered to be obligations "with enhanced normative force" vis-à-vis WTO law, including TRIPS.

Yet another basis for recognising hierarchy in international law may be found in the notion of non-derogable human rights. 119 Most international human rights

¹¹⁶ Barcelona Traction, Light and Power Company, Limited, Judgement, I.C.J. Reports 1970, 3.

¹¹⁷ See I.D. Seiderman (2001), Hierarchy in International Law: The Human Rights Dimension, p. 144. ¹¹⁸ See E. De Wet (2013), *Jus Cogens* and Obligations *Erga Omnes*, in D. Shelton (Ed.), The Oxford Handbook on International Human Rights Law, p. 554. I.D. Seiderman (2001), Hierarchy in International Law: The Human Rights Dimension, as an authoritative voice on the subject, concludes, at p. 145, that "[b]ecause the obligations to respect human rights cannot be reduced to obligations running between any subset of states in the international community, it seems best to consider human rights obligations generally as a class of *erga omnes* obligations. There appears to be no coherent basis upon which to conclude that certain international human rights legal obligations [are] owed to the international community as a whole, while others are owed to individual states. The better view would seem to be that human rights by their nature cannot be reduced to bilateral obligations and so must be *erga omnes*."

¹¹⁹ See, e.g., K. Teraya (2001), Emerging Hierarchy in International Human Rights and Beyond: From the Perspective of Non-Derogable Rights, 12 EJIL 2001, 917–941.

treaties contain so-called derogation clauses, i.e. clauses that, "[i]n time of public emergency which threatens the life of the nation", ¹²⁰ permit states parties to suspend compliance with their obligations emanating from the treaty concerned under certain conditions. These clauses generally exclude certain rights from "suspension", these being "non-derogable rights". ¹²¹ An analysis of derogation clauses in human rights treaties shows that, although many non-derogable rights constitute peremptory norms, this is not true for others. ¹²² It should, moreover, be noted that the ICESCR does not contain a derogation clause. It has been held that this implies that ESCR may not be derogated from in times of crisis, implying that they may, at most, be limited under Article 4 (which is a general limitation clause), leaving their core content intact, Article 4 requiring that limitations "be compatible with the nature of these rights". ¹²³ All this, viewed in the light of the fact that "the quality of non-derogability does suggest that the right in question has special significance", ¹²⁴ implies that WTO law, including TRIPS, ranks lower than, at any rate, a threshold level of protection of ESCR.

A final potential basis for recognising hierarchy in international law to be dealt with here may be found in Article 103 of the UN Charter. This provides that "[i]n the event of a conflict between the obligations of the Members of the United Nations under the ... Charter and their obligations under any other international agreement, their obligations under the ... Charter shall prevail". It has been argued that Article 103 may be viewed as a supremacy clause, to the effect that the aims of the United Nations—maintenance of peace and security, and protection of human rights—constitute an international public order to which other treaty regimes must conform. ¹²⁵ It has also been stated that "[i]n practice, it appears less important whether one regards Art. 103 as the expression of a general hierarchy in international law between the Charter and ordinary law, or as a mere conflict rule removing the applicability of the later-in-time and *lex specialis* rules to the Charter" and that "[i]n any event, Art. 103 is a central norm of the Charter that ensures the prevalence of

¹²⁰ See Art. 4 ICCPR.

¹²¹ See, e.g., Art. 4 ICCPR, Art. 27 of the American Convention on Human Rights of 1969 or Art. 15 of the European Convention for the Protection of Human Rights and Fundamental Freedoms of 1950.

¹²² The Human Rights Committee, supervising implementation of the ICCPR, observes that "[t]he enumeration of non-derogable provisions in Article 4 is related to, but not identical with, the question whether certain human rights obligations bear the nature of peremptory norms of international law". See Human Rights Committee, General Comment No. 29: States of Emergency (Art. 4), UN Doc. CCPR/C/21/Rev.1/Add.11 of 31 August 2001, para. 11.

¹²³ See E. Mottershaw (2008), Economic, Social and Cultural Rights in Armed Conflict: International Human Rights Law and International Humanitarian Law, 12 Int'l J. Hum. Rts. 2008, 451, and the supportive views expressed by the CESCR to this effect in its Concluding Observations and General Comments on various occasions, cited by ibid. at 452.

¹²⁴See E. De Wet (2013), *Jus Cogens* and Obligations *Erga Omnes*, in D. Shelton (Ed.), The Oxford Handbook on International Human Rights Law, p. 545.

¹²⁵ See D. Shelton (2014), International Law and "Relative Normativity", in M. Evans (Ed.), International Law, p. 157.

the Charter over all other *inter se* agreements between States". ¹²⁶ The drafters of the UN Charter included in Article 1(3) as an aim of the UN that of "promoting and encouraging respect for human rights and for fundamental freedoms for all without distinction as to race, sex, language, or religion". ¹²⁷ In the event of a conflict between UN members' human rights obligations under the Charter and non-Charter obligations, such as those under TRIPS, the Charter obligations would have to prevail.

In sum, appreciating that, as Koskenniemi contends, relations of superiority and inferiority in international law flow not merely from peremptory norms, is helpful, as it means that, for human rights-based norms to prevail in case of conflict, these norms need not necessarily form part of the category of *ius cogens*. Without intending to make a sweeping statement and stressing further that each case needs to be assessed in the light of its own particular circumstances, duly respecting the various hierarchies of international law would mean in practice that, in cases of conflict that cannot be resolved through the process of treaty interpretation, IHRL would often have to prevail over TRIPS (or TRIPS-plus agreements).

¹²⁶ See A. Paulus & L. Leiß (2012), in B. Simma et al. (Eds.), The Charter of the United Nations: A Commentary, Vol. II, Article 103, para, 81, p. 2136. The authors go on to state, also at para. 81, p. 2136, that "[i]n line with the general trend towards a further differentiation and even fragmentation of international law ..., the importance of Art. 103 is certain to grow. It serves an important, arguably even constitutional, function in maintaining the coherence and the unity of the international legal system under the umbrella of the UN Charter." It should be noted that Art. 103 will never have the effect of rendering any norm void, it will merely lead to its non-application in any particular case. See ibid. at para. 81, pp. 2135-2136. Whereas Art. 103 UN Charter refers to conflicting treaty provisions (i.e. conflicts between obligations under the Charter and obligations under any other international agreement), it needs to be realised that international obligations of "enhanced normative force" will often form part of customary international law or the "general principles of law recognised by civilised nations". Treaties, such as TRIPS, do not invariably trump customary international law or general principles of law. There does not exist a hierarchy among the various sources of international law. See M. Akehurst (1975), The Hierarchy of the Sources of International Law, 47 BYIL 1975, 273-285. See also J. Pauwelyn (2001), The Role of Public International Law in the WTO: How Far Can We Go?, 95 AJIL 2001, 535-578. See, however, J.O. McGinnis (2003–2004), The Appropriate Hierarchy of Global Multilateralism and Customary International Law: The Example of the WTO, 44 Va. J. Int'l L. 2003–2004, 229–284.

¹²⁷ Whereas suggestions had originally been made to include in the Charter an already drafted bill of human rights, it was, however, decided that the task of defining appropriate human rights standards should be left to the organisation. See R. Wolfrum (2012), in B. Simma et al. (Eds.), The Charter of the United Nations: A Commentary, Vol. I, Article 1, para. 26, p. 115. It is submitted that the various human rights standards thus formulated over the years under the auspices of the UN may, in a sense, be seen to be in the nature of "annexes" to the UN Charter and should play a crucial role in ascertaining the content of UN members' human rights "obligations under the Charter".

¹²⁸ See, e.g., L. Forman (2011), An Elementary Consideration of Humanity? Linking Trade-Related Intellectual Property Rights to the Human Right to Health in International Law, 14 J. W. Intell. Prop. 2011, 155–175, who explores whether the right to health should prevail over TRIPS in situations where that right is grossly violated, as would be the case where access to life-saving medicines is denied to parts of the population, in the light of "international law's accepted hierarchies", namely *ius cogens*, *erga omnes* obligations and Art. 103 of the UN Charter.

6 A Perspective on Measures by the WTO and Its Members Aimed at Establishing Conformity Between TRIPS and International Human Rights Law

The following three headings will have a look at ways in which the WTO and its members may promote and establish conformity between TRIPS and IHRL. Whereas the issues of human rights awareness-raising at the WTO and amendments to the TRIPS Agreement will thus be addressed, the focus will be on whether the WTO possesses the institutional competence to resolve conflicts between TRIPS and IHRL under its dispute settlement procedure, and, if so, how such conflict resolution should be accomplished.

6.1 Human Rights Awareness-Raising at the WTO

Respecting human rights presupposes an awareness of obligations as postulated by IHRL, on the part of the WTO and its officials and experts, but naturally also on the part of those representing governments at the WTO. It will have to be acknowledged that this is often lacking. WTO officials and experts as well as government representatives will usually be trade experts. Dispute settlement panels are composed of "well-qualified governmental and/or non-governmental individuals". including persons who have "taught or published on international trade law or policy, or served as a senior trade policy official of a Member". 129 The Appellate Body "shall comprise persons of recognised authority, with demonstrated expertise in law, international trade and the subject matter of the covered agreements generally". 130 Where matters under TRIPS are at issue, those involved would thus also have a sound knowledge of IP, but usually not of human rights law. A previous UN human rights Special Rapporteur has noted with regard to economists—but the statement also holds true for trade experts—that "[t]here is no human rights education curriculum developed for economists that the Special Rapporteur has been able to find, despite a long search. There is a need for it; her experience has been that neither international human rights law nor the economic rationale behind it is taught in any school of economics, and that human rights training is generally not provided to economists designing ... general development strategies". ¹³¹ Another UN human rights Special Rapporteur has noted with regard to Switzerland as an example of just one country among many that, "[i]n

 $^{^{129}}$ See Art. 8(1) of the Understanding on Rules and Procedures Governing the Settlement of Disputes (DSU).

¹³⁰ See Art. 11(3) DSU.

¹³¹ See K. Tomaševski (2004), Report of the Special Rapporteur on the Right to Education, UN Doc. E/CN.4/2004/45, para. 10. The Special Rapporteur further "[recalled] the words of John Maynard Keynes about the powerful influence that economists have even when they are wrong, as

Switzerland, . . . there is no coordination at all between the Swiss mission to WTO and the Swiss mission to the United Nations [dealing *inter alia* with human rights], even though the two equally competent ambassadors work in the same building in Geneva. The lack of coordination and coherence, often results in outright contradictions in policies towards development assistance and policies towards WTO". ¹³²

In other words, there is a need for "creating a common language" at the international level among all the actors concerned, one that is duly based on human rights. 133 Mainstreaming human rights into the law and activities of international organisations that are not otherwise concerned with human rights is crucial, as "[t]he price of the lack of a vocabulary shared between economics [or commerce] and human rights is the lack of dialogue, which is impossible without a common language". 134 It is suggested, therefore, that the WTO should regularly offer compulsory courses in IHRL to its officers and experts, and to those sitting on dispute settlement panels or the Appellate Body. Likewise, the WTO should encourage all its members to take steps directed at ensuring that governmental delegates have a sound knowledge of IHRL. Yet another way of securing that human rights are incorporated into WTO law and activities is by reforming the current system of NGO participation in the WTO's work, so as to allow NGOs that "may add value" to WTO policy-making, trade negotiations or dispute settlement procedures—including NGOs devoted to protecting human rights—to participate meaningfully in such work. The WTO Agreement merely states in Article V(2) that "[t]he General Council may make appropriate arrangements for consultation and cooperation with non-governmental organisations concerned with matters related to those of the WTO". The 1996 Guidelines for Arrangements on Relations with Non-Governmental Organisations mention various forms of arrangements in this respect, ¹³⁵ but NGOs have neither observer nor consultative status (the right to participate in the meetings of WTO bodies) with the WTO. The rules state that "there is currently a broadly held view that it would not be possible for NGOs to be directly involved in the work of the WTO or its meetings". ¹³⁶ The lack of detailed rules on the selection, accreditation and participation of NGOs in the work of the WTO may explain the rather modest contribution of NGOs, also of those focusing on human rights, to that work so far. 137

well as those of Paul Samuelson about the irrelevance of constitutional guarantees when these conflict with the recipes in economics textbooks".

¹³² See J. Ziegler (2005), Report of the Special Rapporteur on the Right to Food, UN Doc. E/CN.4/ 2005/47, para. 40.

¹³³See K. Tomaševski (1999), Preliminary Report of the Special Rapporteur on the Right to Education, UN Doc. E/CN.4/1999/49, paras. 12–14.

¹³⁴ See K. Tomaševski (2004), Report of the Special Rapporteur on the Right to Education, UN Doc. E/CN.4/2004/45, para. 10.

¹³⁵ See para. IV.

¹³⁶ See para. VI.

¹³⁷ See P. Van den Bossche (2010), NGOs and the WTO: Limits to Involvement?, in D.P. Steger (Ed.), Redesigning the World Trade Organisation for the Twenty-First Century, pp. 344–345. For

6.2 Amending the TRIPS Agreement

It is generally appreciated that "it is extremely difficult to secure sufficient political support for amending the text of such broad-based multilateral instruments [as TRIPS], so [that] this path appears to be very unlikely to be achievable". Even so, as has been pointed out above, 139 states, by having agreed to accept obligations under TRIPS—an agreement failing to offer sufficient safeguards for the protection of human rights—may arguably be viewed as already having violated obligations under IHRL, entailing their international responsibility to try raising support for measures aimed at rectifying deficits in this regard, including efforts directed at amending the text of TRIPS. 140

One such amendment has been made so far. A new Article 31^{bis} has been inserted in the TRIPS Agreement to allow members to grant compulsory licenses for the production of protected pharmaceutical products to local companies without it being required that the products concerned be intended for the supply of the domestic market, but envisaging instead their exportation to "eligible" importing members. The aim of the provision essentially is to make it possible for states not possessing the facilities to produce medicines to have generic drugs imported from another country, so as to ensure access to affordable essential medication to relevant parts of their population. Although neither the amendment, which has not entered into force to date, nor the General Council Decision of 30 August 2003 that introduced the system for the interim, refers to human rights concerns as such, it is clear that the

the very different and active role envisaged for NGOs, both those in consultative status with ECOSOC and those without such status, in relation to the work of the CESCR, see UN Doc. E/2001/22, Annex V, "Non-governmental organisation participation in the activities of the Committee on Economic, Social and Cultural Rights." See also Sect. 7.2 below. Regarding intergovernmental organisations, Art. V(1) WTO Agreement provides that "[t]he General Council shall make appropriate arrangements for effective cooperation with other intergovernmental organisations that have responsibilities related to those of the WTO". The General Council may, on a consensual basis, grant observer status to such organisations. See Observer Status for International Intergovernmental Organisations in the WTO, WT/L/161, Annex 3. See also Minutes of the General Council of 22 October 1997, WT/GC/M/23, 23.

¹³⁸ See A. McBeth (2010), International Economic Actors and Human Rights, p. 162.

¹³⁹ See Sect. 4 above.

¹⁴⁰ An alternative or, better even, complementary measure to the actual amendment of TRIPS lies in the potential adoption of what one might term "safeguard declarations", i.e. soft law standards formulated by the WTO itself, directed at ensuring that the WTO and its members take due account of human rights concerns when formulating IP policy, interpreting WTO law or drafting or amending legal provisions. The Doha Declaration on the TRIPS agreement and public health, adopted at the WTO Ministerial Conference in 2001, calling upon members to use the flexibilities built into TRIPS, including compulsory licensing and parallel importing, would be a case in point. Though not specifically mentioning the right to health, safeguarding the latter constitutes the central concern of the declaration.

protection of the right to health lies at the basis of the modification. Unfortunately, implementation of the system has not really proven successful so far. ¹⁴¹

As has been explained, a human rights approach to TRIPS would place the protection of human rights at the centre of the objectives of IP protection rather than relegate them to permitted exceptions subordinate to the provisions of an agreement reflecting an excessive protection of IP rights and a lack of balance in their design. It would further require clearly spelling out the responsibilities of IP right holders in the light of human rights considerations. In line with these observations, modifications should, on the one hand, be made to some of "The General Provisions and Basic Principles" in Part I of the TRIPS Agreement, specifically Article 7 on "Objectives" and Article 8 on "Principles". Both provisions should expressly refer to "human rights" and stipulate considerations based on the language of the major human rights treaties. Amendments should raise the level of compulsion for the adoption of measures by WTO members aimed at protecting the public interest in securing access to food, medicine or education when formulating or amending their laws in accordance with TRIPS, and for taking measures directed at preventing the abuse of IP rights by right holders or the resort to anticompetitive practices. Additionally, there should be fundamental provisions setting out how a balance of the interests of right holders, users and the larger public may be achieved. On the other hand, it is necessary to modify the provisions on the various individual IP rights in Part II of the Agreement. In particular, amendments "giving flesh" to the different clauses on limitations and exceptions for copyright, trade marks, patents, etc. should be made by spelling out the human rights criteria that should play a role in each case. 142

6.3 The WTO Dispute Settlement System

If the WTO and its members are the bearers of obligations under IHRL, this must naturally have implications for the WTO dispute settlement system. The Dispute Settlement Body (DSB), panels examining disputes and the Appellate Body must, in resolving disputes, respect relevant human rights obligations. As will be

¹⁴¹See D. Nicola & O. Owoeyea (2013), Using TRIPS Flexibilities to Facilitate Access to Medicines, 91 Bull. World Health Organ. 2013, 533–534, who point out that "nine years after the adoption of the Implementation Decision, only Rwanda has used the system to import antiretrovirals . . . from Canada, and the period it took to achieve that was anything but expeditious".

¹⁴²For proposals of amendments to TRIPS largely in line with the sentiments expressed here, avoiding, however, any express reference to "human rights", see the section on "Proposed amended text (synopsis)" in A. Kur & M. Levin (Eds.) (2011), Intellectual Property Rights in a Fair World Trade System: Proposals for Reform of TRIPS, pp. 455–525 (Art. 7 at pp. 463–464, Art. 8 at pp. 464–465, a new Art. 8a on "Balance of Interests" at pp. 465–467, a new Art. 8b on "Interface between IP Rights and Competition Law" at p. 467, and IP rights in Part II TRIPS at pp. 468 et seq.).

explained, however, this obligation also flows from the principle of "systemic integration".

The basis for a claim under the TRIPS Agreement is that a contracting party considers that "any benefit accruing to it directly or indirectly under [TRIPS] is being nullified or impaired or that the attainment of any objective of the Agreement is being impeded" as the result of any measure taken by another contracting party or the latter's failure to carry out its obligations under TRIPS. 143 Benefits are assumed to be nullified or impaired if TRIPS provisions have been breached, even if the complaining party cannot show that it has suffered any significant damages. 144 With regard to the WTO dispute settlement system,

[t]he Members recognise that it serves to preserve the rights and obligations of Members under the covered agreements, and to clarify the existing provisions of those agreements in accordance with customary rules of interpretation of public international law. Recommendations and rulings of the DSB cannot add to or diminish the rights and obligations provided in the covered agreements. ¹⁴⁵

Although the WTO Agreement grants to the Ministerial Conference and the General Council "the exclusive authority to adopt interpretations" of the WTO Agreement and its annexures, ¹⁴⁶ the *de facto* situation is that dispute settlement reports are considered authoritative in clarifying WTO rules. 147 Whereas early dispute settlement reports reflected a narrow economic interpretation, this has gradually been changing, particularly as a result of the approach taken by the Appellate Body. It has been observed that the Appellate Body "is increasingly recognising the legitimacy of non-trade policies pursued by States and is deferring more to the discretion of States in implementing those policies", and that it "also appears to be growing bolder in its willingness to interpret WTO provisions broadly, perhaps equivalent to the tendency of common law courts to 'discover' legal and constitutional principles". 148 The increased significance of non-trade factors in WTO dispute settlement is also borne out by the evolution of the *amicus* curiae brief. In United States - Shrimp, the Appellate Body held that unsolicited information from NGOs could be taken into consideration in settling disputes. 149 Reliance on such information remains within the discretion of dispute settlement bodies, however. It should further be noted that a panel "[has] the right to seek information and technical advice from any individual or body which it deems

¹⁴³ See Art. 64 TRIPS read with Art. XXIII(1) GATT.

¹⁴⁴ See GATT Panel Report, United States – Taxes on Petroleum and Certain Imported Substances, L/6175, adopted 17 June 1987, BISD 34S/136.

¹⁴⁵ See Art. 3(2) DSU.

¹⁴⁶ See Art. IX(2) WTO Agreement.

¹⁴⁷ See R. Bhala (1999), The Precedent Setters: *De Facto Stare Decisis* in WTO Adjudication (Part Two of a Trilogy), 9 J. Transnat'l L. & Pol'y 1999, 1–151.

¹⁴⁸ See A. McBeth (2010), International Economic Actors and Human Rights, p. 105.

¹⁴⁹ See Appellate Body Report, United States – Import Prohibition of Certain Shrimp and Shrimp Products, WT/DS58/AB/R, adopted 6 November 1998, DSR 1998;VII, p. 2755.

appropriate"¹⁵⁰ and that panels "may seek information from any relevant source and may consult experts to obtain their opinion on certain aspects of the matter".¹⁵¹ Information supplied by human rights NGOs or international bodies, such as the ILO, the WHO or the human rights treaty monitoring bodies, may thus play a potential role in the dispute settlement process.¹⁵²

It may thus be observed that, despite the DSB's rather narrow terms of reference, requiring it to clarify the covered agreements, thereby not adding to or diminishing the rights and obligations in those agreements, the practice of the DSB is to adopt a broader approach. Its approach, in terms of which non-trade factors are allowed to play a role, does, of course, offer room for human rights considerations to be taken into account. Aware of the risk of further fragmentation in international law, with various bodies responsible for enforcing different fields of law potentially pronouncing on human rights issues, and considering further that there does not exist an international court with comprehensive jurisdiction to guarantee consistency in the interpretation of IHRL, ¹⁵³ it may well be asked whether it is legitimate (or even merely desirable) whatsoever, for the DSB "to apply IHRL". The tendency of international tribunals often is to avoid acknowledging that there exists a conflict between the rules of the body of law they are obliged to enforce and those of another body of law, specifically IHRL, for example, by applying various formalistic techniques, such as distinguishing between substantive and procedural law, thus shunning the challenge of resolving conflicts between the different bodies of international law concerned. 154 This is unfortunate, however, as the spillover effect IHRL may have on other areas of international law depends on the willingness of

¹⁵⁰ See Art. 13(1) DSU.

¹⁵¹ See Art. 13(2) DSU.

¹⁵² See A. McBeth (2010), International Economic Actors and Human Rights, pp. 105–106.

¹⁵³On the intricate question whether the International Court of Justice can resolve conflicts between TRIPS and the ICESCR, see H.M. Haugen (2007), The Right to Food and the TRIPS Agreement: With a Particular Emphasis on Developing Countries' Measures for Food Production and Distribution, pp. 330-334. The ICJ may decide disputes between states parties to the ICJ Statute, which they refer to it, and it may grant non-binding advisory opinions at the request of bodies authorised under the UN Charter to make such requests. As regards advisory opinions, it is, in fact, conceivable that the Court may be approached by competent organs for its views in a case of conflict between TRIPS and the ICESCR. As regards disputes, it should be noted that neither TRIPS nor the ICESCR contains any provision referring disputes to the ICJ. Both the ICJ Statute and the WTO Dispute Settlement Understanding contain clauses providing for exclusive jurisdiction. Art. 36(2) ICJ Statute thus provides that states parties may accept the compulsory jurisdiction of the Court regarding the interpretation of a treaty or any question of international law. Art. 23(2) (a) DSU requires WTO members not to make a determination to the effect that a violation has occurred, "except through recourse to dispute settlement" under the WTO. The relationship between these clauses is contentious. Haugen, at p. 332, suggests that the ICJ is competent to adjudicate in those cases where "a dispute involving both trade and obligations arising under other treaties" is involved, but that "[d]isputes that relate strictly to WTO agreements are not appropriately addressed by the ICJ."

¹⁵⁴ See E. De Wet & J. Vidmar (2012), Conclusions, in E. De Wet & J. Vidmar (Eds.), Hierarchy in International Law: The Place of Human Rights, pp. 308–309.

the stated tribunals to accept the task of facilitating that spillover effect. In the absence of a powerful international court and appreciating that simply "ignoring" IHRL nowadays cannot be considered a realistic option anymore, the "international judge" should consider it his or her duty to responsibly attempt resolving conflicts between his or her and another body of law (IHRL) by also applying rules strictly speaking beyond his or her remit. "Responsibility" in the case of the various WTO dispute settlement bodies would notably entail seeking the expertise of the various human rights treaty bodies, supervising implementation of the different UN human rights agreements, where appropriate, particularly that of the CESCR when ESCR are concerned. ¹⁵⁵

It has famously been asked: "If intellectual property rights are a fit subject for the WTO, why not labour rights, or human rights?" The suggestion is that, if the WTO, in a sense anomalously, deals with a subject matter such as IP rights—such regulation strictly speaking fettering absolute free trade—it can just as well deal with human rights. It could conclude treaties on "trade-related aspects of labour or human rights", entailing WTO responsibility for developing policies on the topics stated and then implementing and enforcing them. 157 Elsewhere, it has been suggested that, as the WTO promotes the rule of law "more effectively than any other worldwide treaty system" through its unique compulsory dispute settlement procedures, it should play an active role in human rights promotion and enforcement. 158 It should be appreciated, however, that—although WTO law and activity

¹⁵⁵ See the various useful guidelines prepared for "the international judge" by S. Linton & F.K. Tiba (2008-2009), The International Judge in an Age of Multiple International Courts and Tribunals, 9 Chi. J. Int'l L. 2008–2009, 464–470. To cite some of them in part: "1.4 In general, judges should keep within their own specialisation and within areas that they are mandated to rule on. Where it is necessary for resolution of the dispute before them, they should be able to venture beyond these boundaries...[,]" "3.2 Where possible, international judges should strive to ensure there is complementarity and consistency, as opposed to confrontation and conflict ... Differences in interpretation do not equal conflicts of jurisdiction. A coherent body of law does not require identical decisions, but sufficient consistency, including in the application of basic principles[,]" "3.3 It is essential that international judges be well trained in the basic principles of public international law. International judges who have that soundness of background will be 'speaking the same language' as their counterparts, that language being essential for operation in international dispute settlement. This reduces the risks of conflicting jurisprudence on core issues[,]""3.4 There is no doctrine of stare decisis in international law, and there is no formal hierarchy between international courts and tribunals. But the decisions of other courts and tribunals should be treated with respect and given careful consideration" and "3.5.4 To the extent necessary, international judges should encourage amicus curiae submissions in disputes on the law or where dealing with areas where they are less proficient".

¹⁵⁶See J. Stiglitz (2002), A Fair Deal for the World, review of "On Globalisation" by George Soros, New York Review of Books of 23 May 2002, quoted in P. Alston (2002), Resisting the Merger and Acquisition of Human Rights by Trade Law: A Reply to Petersmann, 13 EJIL 2002, 818.

¹⁵⁷ See C. Thomas (2004), Should the World Trade Organisation Incorporate Labour and Environmental Standards?, 61 Wash. & Lee L. Rev. 2004, 347–404.

¹⁵⁸ See E.-U. Petersmann (2000), The WTO Constitution and Human Rights, 3 J. Int'l Econ. L. 2000, 19–25 (quotation at 20).

need to fully respect and be brought into compliance with human rights requirements—the WTO will ultimately remain an organisation whose essential task is to advance free trade, which task, as has been argued, by its very nature tends to be in conflict with that of protecting human rights. For this reason, the relevant agencies within the UN system, such as WHO, FAO, ILO, etc., should retain primary responsibility for formulating policies promoting human rights. The WTO is also not an adequate forum to deal with human rights complaints. Adjudging compliance with human rights should remain the responsibility of the known human rights bodies. Granting a trade-focused organisation the competence to formulate human rights policies and allowing these to be enforced before a panel "could pose terrible consequences for the legitimacy and significance of dedicated human rights bodies". ¹⁵⁹ Altogether, the WTO should be considered ill-equipped to act as a human rights body. As has been stated:

The Agreement Establishing the WTO is not a constitutional instrument in the sense of constituting a political or social community, and its mandate and objectives are narrowly focused around the goal of "expanding the production of and trade in goods and services". Despite the expansion of the original GATT mandate ... the basic structure of the Organisation has remained unchanged. It is an institution which is dominated by producers, and in which the economic, social, cultural, political and various other interests of a great many people are not, in practice, represented. Its institutional structure, its processes and the outcomes it sanctions are far from what would be required of a body to which significant human rights authority could be entrusted. ¹⁶⁰

But, what then is it legitimate to expect of the WTO dispute settlement bodies? *Firstly*, whenever a WTO member brings a claim before the DSB, alleging that another member has "nullified or impaired its benefits" under TRIPS, and the latter raises a defence based on human rights as binding between the parties, also if only remotely based on the terms of TRIPS, then—at any rate to the extent that the human rights relied on (whether under treaty, custom or general principles) correspond to human rights the WTO or its members are bound under IHRL to respect—it would have to entertain that defence. "Entertaining a defence" may mean dealing responsibly with the defence itself as described above. It may, however, also mean declining to exercise jurisdiction (exclusive jurisdiction before the WTO thereby "being exhausted") and encouraging the parties to have the dispute decided by a court or tribunal with a stronger claim to jurisdiction, potentially involving the International Court of Justice or an *ad hoc* tribunal. ¹⁶¹

¹⁵⁹ See A. McBeth (2010), International Economic Actors and Human Rights, p. 161.

¹⁶⁰ See P. Alston (2002), Resisting the Merger and Acquisition of Human Rights by Trade Law: A Reply to Petersmann, 13 EJIL 2002, 836.

¹⁶¹ See guidelines 2.5. and 2.10. of the guidelines prepared for "the international judge" by S. Linton & F.K. Tiba (2008–2009), The International Judge in an Age of Multiple International Courts and Tribunals, 9 Chi. J. Int'l L. 2008–2009, 464–470. See also J. Pauwelyn (2005), Human Rights in WTO Settlement, in T. Cottier, J. Pauwelyn & E. Bürgi Bonanomi (Eds.), Human Rights and International Trade, who, at pp. 229–231, argues in favour of WTO panels entertaining human rights defences when raised.

Secondly, conflicts between TRIPS and IHRL should be resolved in a certain manner. They should, to the furthest extent possible, be resolved through the process of treaty interpretation. The WTO dispute settlement bodies are required to interpret WTO law, including TRIPS, in accordance with relevant rules of international law, including those of IHRL. The latter rules should inform and thereby contribute towards balance in the interpretation of the rules of the former. This obligation flows from the rules of treaty interpretation under customary international law (as codified in Article 31 of the Vienna Convention on the Law of Treaties of 1969). As has been seen, Article 3(2) DSU recognises that the WTO dispute settlement system should "clarify the existing provisions of [WTO] agreements in accordance with customary rules of interpretation of public international law". However, to the extent that the WTO or its members are bound by IHRL, this obligation may also be considered to flow from the duty to respect the human rights concerned. Article 31 of the Vienna Convention states in part:

- 1. A treaty shall be interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in the light of its object and purpose.
- 2. The context for the purpose of the interpretation of a treaty shall comprise, in addition to the text, including its preamble and annexes:
- 3. There shall be taken into account, together with the context:
 - (c) any relevant rules of international law applicable in the relations between the parties.

For purposes of determining the context of treaty provisions reference is thus also to be had to the preamble of a treaty. The preamble to the WTO Agreement mentions the need for trade to "raise standards of living", "ensure full employment", secure "a large and steadily growing volume of real income", "allow for the optimal use of the world's resources in accordance with the objective of sustainable development" and "ensure that developing countries, and especially the least developed among them,

¹⁶² The WTO's Appellate Body stated in its very first case, Appellate Body Report, United States – Standards for Reformulated and Conventional Gasoline, WT/DS2/AB/R, adopted 20 May 1996, DSR 1996:I, p. 3, at p. 17, that, "[GATT] is not to be read in clinical isolation from public international law". See further M. Koskenniemi (2006), Fragmentation of International Law: Difficulties Arising from the Diversification and Expansion of International Law, Report of the Study Group of the International Law Commission, UN Doc. A/CN.4/L.682 of 13 April 2006, who remarks at para. 170 that "[e]ven as it is clear that the competence of WTO bodies is limited to consideration of claims under the covered agreements (and not, for example, under environmental or human rights treaties), when elucidating the content of the relevant rights and obligations, WTO bodies must situate those rights and obligations within the overall context of general international law (including the relevant environmental and human rights treaties)".

¹⁶³ For a detailed analysis of Art. 31 Vienna Convention in the context of TRIPS, see P. Xiong (2012), An International Law Perspective on the Protection of Human Rights in the TRIPS Agreement: An Interpretation of the TRIPS Agreement in Relation to the Right to Health, pp. 115–142.

secure a share in the growth in international trade". The TRIPS Agreement highlights in its preamble the importance of "recognising the underlying public policy objectives of national systems for the protection of intellectual property, including developmental and technological objectives" and "also the special needs of the least-developed country members in respect of maximum flexibility in the domestic implementation of laws and regulations in order to enable them to create a sound and viable technological base". Not only the preamble, but also the main text of TRIPS, specifically Article 7 on "Objectives" (stating, for example, that IP protection should contribute to the transfer of technology) and Article 8 on "Principles" (*inter alia* allowing national measures "necessary to protect public health and nutrition"), is, of course, part of the context for purposes of treaty interpretation.

Where Article 31(3)(c) Vienna Convention mentions "any relevant rules of international law applicable in the relations between the parties" that are to be taken into account, it may well be asked what this refers to. This covers treaties, customary international law and the "general principles of law recognised by civilised nations". As regards treaties, the question is whether all the parties to the treaty being interpreted must also be parties to the treaty relied upon for interpretation purposes. This would effectively exclude most other multilateral treaties, including those addressing human rights. The U.S.A., for example, is a member of the WTO, but not a party to the ICESCR. A WTO panel previously held that only agreements to which all WTO members were parties could be taken into account under Article 31(3)(c). ¹⁶⁴ The better view, however, is "to permit reference to another treaty provided that the parties in dispute are also parties to that other treaty", as this "would simply reflect the need to respect ... party will". 165 Article 31(3)(c) gives expression to the principle of "systemic integration", calling upon a dispute settlement body "to situate the rules that are being invoked . . . in the context of other rules and principles that might have bearing upon a case. In this process the more concrete or immediately available sources are read against each other and against the general law 'in the background'". 166 The various provisions of the WTO and TRIPS Agreements referred to in the previous paragraph—alluding, as they do, to the right to an adequate standard of living, the right to work, the right to a healthy environment, the right to development. 167 the right to

¹⁶⁴ See Panel Report, European Communities – Measures Affecting the Approval and Marketing of Biotech Products, WT/DS291/R, WT/DS292/R, WT/DS293/R, adopted 21 November 2006, DSR 2006:IV, p. 1251, paras. 7.68-7.70.

¹⁶⁵ See M. Koskenniemi (2006), Fragmentation of International Law: Difficulties Arising from the Diversification and Expansion of International Law, Report of the Study Group of the International Law Commission, UN Doc. A/CN.4/L.682 of 13 April 2006, para. 472.

¹⁶⁶ Ibid., para. 479. Art. 31(3)(c) operates like a "master key" to the house of international law: "In case there is a systemic problem – an inconsistency, a conflict, an overlap between two or more norms – and no other interpretative means provides a resolution, then recourse may always be had to that Article in order to proceed in a reasoned way". Ibid., para. 420.

¹⁶⁷ The right to development may be said to comprise all human rights. It is, however, more than the mere sum of these. It is a synthesis right which allows a focus on the entire spectrum of human rights. See P. Alston (1981), Prevention versus Cure as a Human Rights Strategy, in International Commission of Jurists (Ed.), Development, Human Rights and the Rule of Law, p. 104.

health and the right to food—make it possible (and obligatory) for "relevant rules" of IHRL to be taken into account in interpreting TRIPS. ¹⁶⁸ The provisions should be relied on as a gateway through which "relevant rules" of IHRL may enter to influence the interpretation of TRIPS. ¹⁶⁹

But, what if conflicts between TRIPS and IHRL prove difficult to resolve by way of a "harmonious interpretation" of the norms concerned as envisaged in the above discussion? In this case, priority will have to be determined in the light of accepted principles of international law taking into account: (1) specificity (*lex specialis*), (2) temporality (*lex posterior*), and (3) status (*ius cogens*, obligations *erga omnes*, non-derogable human rights, Article 103 UN Charter, etc.). The *lex specialis* principle (*lex specialis derogat legi generali*), which is a general principle of international law, implies that, whenever two or more norms deal with the same subject matter, priority should be accorded to the norm that is more specific. The principle has been stated to be of limited usefulness in cases of conflicts between TRIPS and IHRL, as both WTO law as well as IHRL constitute specialised regimes and conflicts may be described as inter-regime conflicts. The *lex posterior* rule (*lex posterior derogat legi priori*), which has its basis in Article 30 of the Vienna Convention, is to the effect that, when all the parties to a treaty are also parties to an earlier treaty on the same subject, the earlier treaty will apply only to the extent that its

¹⁶⁸See A. McBeth (2010), International Economic Actors and Human Rights, pp. 108–109, concentrating on the preamble of the WTO Agreement.

¹⁶⁹ In this sense, regarding the stated provisions as flexibility devices making it possible for the WTO (and its members) to achieve compliance with IHRL, see, e.g., H. Grosse Ruse-Khan (2008), Proportionality and Balancing within the Objectives for Intellectual Property Protection, in P.L.C. Torremans (Ed.), Intellectual Property and Human Rights: Enhanced Edition of Copyright and Human Rights, p. 191.

¹⁷⁰ See M. Koskenniemi (2006), Fragmentation of International Law: Difficulties Arising from the Diversification and Expansion of International Law, Report of the Study Group of the International Law Commission, UN Doc. A/CN.4/L.682 of 13 April 2006, para. 412. A. Paulus & L. Leiß (2012), in B. Simma et al. (Eds.), The Charter of the United Nations: A Commentary, Vol. II, Article 103, state, at para. 81, p. 2137, with regard to Art. 103 UN Charter that this "primarily serves as a rule of interpretation of international law in line with the Charter, and *as a rule of last resort* to protect the authority of the Charter as the yardstick of the law of the international community" (emphasis added). In other words, there exists a presumption of compatibility of the treaty being interpreted with the UN Charter. Art. 103 is of a residual character. See at paras. 17–18 and 20–28, pp. 2118–2121.

¹⁷¹ See E. De Wet & J. Vidmar (2012), Conclusions, in E. De Wet & J. Vidmar (Eds.), Hierarchy in International Law: The Place of Human Rights, pp. 305–306. Generally on the *lex specialis* rule, see M. Koskenniemi (2006), Fragmentation of International Law: Difficulties Arising from the Diversification and Expansion of International Law, Report of the Study Group of the International Law Commission, UN Doc. A/CN.4/L.682 of 13 April 2006, paras. 46–222. On the *lex specialis* rule specifically in the context of TRIPS and IHRL, see H.M. Haugen (2007), The Right to Food and the TRIPS Agreement: With a Particular Emphasis on Developing Countries' Measures for Food Production and Distribution, pp. 349–350.

provisions are compatible with those of the later treaty. ¹⁷² Even if one were to consider TRIPS, dating from 1994, a treaty on the same subject and with the same parties as notably the ICCPR or the ICESCR, both dating from 1966, which should thus enjoy priority, it is submitted that the *lex posterior* rule (and also the *lex specialis* rule) must be held to be subordinate to priority rules on status. Specificity or temporality should naturally only play a role where norms rank on a par. At this point then, the discussion on hierarchy in international law in Sect. 5 above becomes relevant.

7 The Implications of Extraterritorial State Obligations Under the International Covenant on Economic, Social and Cultural Rights for TRIPS and the Role of the Committee on Economic, Social and Cultural Rights

The International Covenant on Economic, Social and Cultural Rights (ICESCR) is the most important global document protecting ESCR and the UN Committee on Economic, Social and Cultural Rights (CESCR), supervising implementation of the ICESCR, the most important body at the global level commenting on these. ESCR are the group of human rights particularly threatened in the TRIPS context. A study on TRIPS and human rights failing to discuss the role of Covenant and Committee is incomplete. This section will once more address the notion of extraterritorial state obligations, focusing here on the implications of extraterritorial state obligations under the ICESCR for TRIPS, addressing further the Covenant's supervisory system and the Committee's role in strengthening the observance of extraterritorial state obligations in the TRIPS context.

7.1 Extraterritorial State Obligations Under the International Covenant on Economic, Social and Cultural Rights and Implications for TRIPS

It is recognised among human rights experts that "[a]ll States have obligations to respect, protect and fulfil human rights, including civil, cultural, economic, political

¹⁷² Generally on the *lex posterior* rule, see M. Koskenniemi (2006), Fragmentation of International Law: Difficulties Arising from the Diversification and Expansion of International Law, Report of the Study Group of the International Law Commission, UN Doc. A/CN.4/L.682 of 13 April 2006, paras. 223–323. On the *lex posterior* rule specifically in the context of TRIPS and IHRL, see H.M. Haugen (2007), The Right to Food and the TRIPS Agreement: With a Particular Emphasis on Developing Countries' Measures for Food Production and Distribution, pp. 350–352.

and social rights, both within their territories and extraterritorially". ¹⁷³ Article 2 (1) ICESCR, referred to in Sect. 2 above, gives expression specifically to the obligation of states parties to fulfil ESCR, domestically and extraterritorially, within the framework of the Covenant. But, states parties to the ICESCR are the bearers of obligations to respect and protect ESCR too. Obligations under the Covenant will have to influence the way states parties design their national IP systems in giving effect to obligations under TRIPS. If needs be—in accordance with what has been stated on the priority of IHRL over TRIPS in most instances they should be courageous enough to devise their IP systems "in conflict with" TRIPS provisions, if that should be necessary to comply with obligations under the Covenant—and the WTO should defer to any national decision to act in the manner described. In the following, the focus will be on the notion that states parties have extraterritorial obligations to respect, protect and fulfil Covenant rights under the ICESCR, concentrating on the TRIPS context in this respect. Extraterritorial obligations imply the responsibility of states parties for their conduct where this may have an effect on the rights of populations in foreign jurisdictions, and hence cover the extraterritorial effects of their national IP systems, but also their conduct within international organisations, such as the WTO. 174

¹⁷³ See Principle 3 of the Maastricht Principles on Extraterritorial Obligations of States in the Area of Economic, Social and Cultural Rights. For a reproduction of and commentary to the Maastricht Principles, see O. De Schutter et al. (2012), Commentary to the Maastricht Principles on Extraterritorial Obligations of States in the Area of Economic, Social and Cultural Rights, 34 Hum. Rts. Q. 2012, 1084–1169. See the definitions of obligations to respect, protect and fulfil provided in Sect. 3 above. ¹⁷⁴The Maastricht Principles on Extraterritorial Obligations of States in the Area of Economic, Social and Cultural Rights define "extraterritorial obligations" in Principle 8 as follows: "...extraterritorial obligations encompass: a) obligations relating to the acts and omissions of a State, within or beyond its territory, that have effects on the enjoyment of human rights outside of that State's territory; and b) obligations of a global character that are set out in the Charter of the United Nations and human rights instruments to take action, separately, and jointly through international cooperation, to realise human rights universally". See, e.g., the discussion of extraterritorial obligations in S.I. Skogly (2010), Extraterritoriality: Universal Human Rights without Universal Obligations?, in S. Joseph & A. McBeth (Eds.), Research Handbook on International Human Rights Law, pp. 71-96, the discussion of the notion of extraterritorial obligations of states with regard to the right to food in J. Ziegler (2005), Report of the Special Rapporteur on the Right to Food, UN Doc. E/CN.4/2005/47, paras. 34-59, or the discussion of extraterritorial human rights obligations in the WTO context in S. Joseph (2011), Blame It on the WTO? A Human Rights Critique, pp. 245-264. Specifically on extraterritorial obligations in the context of ESCR and the ICESCR, see F. Coomans (2004), Some Remarks on the Extraterritorial Application of the International Covenant on Economic, Social and Cultural Rights, in F. Coomans & M.T. Kamminga (Eds.), Extraterritorial Application of Human Rights Treaties, pp. 183-199; R. Künnemann (2004), Extraterritorial Application of the International Covenant on Economic, Social and Cultural Rights, in F. Coomans & M.T. Kamminga (Eds.), Extraterritorial Application of Human Rights Treaties, pp. 201-231; M. Craven (2007), The Violence of Dispossession: Extra-Territoriality and Economic, Social, and Cultural Rights, in M.A. Baderin & R. McCorquodale (Eds.), Economic, Social and Cultural Rights in Action, pp. 71-88; or M. Langford et al. (Eds.) (2014), Global Justice, State Duties: The Extraterritorial Scope of Economic, Social and Cultural Rights in International Law.

Although the ICESCR contains neither a clause referring to "territory" or "jurisdiction" nor any unambiguous provision determining that it applies extraterritorially, the CESCR insists that the Covenant does give rise to extraterritorial obligations. The Committee sees Article 2(1) ICESCR, which requires states parties to take steps directed at realising Covenant rights "individually and through international assistance and cooperation, especially economic and technical", as the basis for holding that the Covenant covers extraterritorial obligations. ¹⁷⁶

States parties to the ICESCR have an extraterritorial obligation *to respect* ESCR. This requires them to ensure that their policies and practices do not result in violations of ESCR of those living in other countries. The obligation is negative in nature and does not require major resources to be provided. ¹⁷⁷ A UN expert has thus stated with regard to the right to food that

States should also refrain from taking decisions within the WTO ... that can lead to violation of the right to food in other countries. It is evident that decisions taken by a Ministry of Agriculture or a Ministry of Finance within WTO ... are acts of the authorities of a State that can produce effects outside their own territory. If these effects lead to violations of the right to food, then these decisions must be revised. 178

Likewise, states parties would have to ensure that any sanctions they adopt against WTO members in cases of non-compliance with WTO rulings respect

¹⁷⁵ The CESCR has expressed this time and again, more clearly, for example, in its General Comment No. 8, The Relationship between Economic Sanctions and Respect for Economic, Social and Cultural Rights, UN Doc. E/1998/22, at para. 7, where it stated that "[j]ust as the international community insists that any targeted State must respect the civil and political rights of its citizens, so too must that State and the international community itself do everything possible to protect at least the core content of the economic, social and cultural rights of the affected peoples of that State...". See M. Craven (2007), The Violence of Dispossession: Extra-Territoriality and Economic, Social, and Cultural Rights, in M.A. Baderin & R. McCorquodale (Eds.), Economic, Social and Cultural Rights in Action, pp. 75–76, for further examples of instances where the Committee has confirmed that the ICESCR gives rise to extraterritorial obligations.

¹⁷⁶ See S.I. Skogly (2010), Extraterritoriality: Universal Human Rights without Universal Obligations?, in S. Joseph & A. McBeth (Eds.), Research Handbook on International Human Rights Law, pp. 79–80. Although many legal writers have come to accept the notion that the ICESCR must be considered to cover extraterritorial obligations, the official position of many states, such as the U.S.A., is to deny this claim, however. See M. Craven (2007), The Violence of Dispossession: Extra-Territoriality and Economic, Social, and Cultural Rights, in M.A. Baderin & R. McCorquodale (Eds.), Economic, Social and Cultural Rights in Action, p. 77.

¹⁷⁷ See J. Ziegler (2005), Report of the Special Rapporteur on the Right to Food, UN Doc. E/CN.4/2005/47, para. 49. See also F. Coomans (2004), Some Remarks on the Extraterritorial Application of the International Covenant on Economic, Social and Cultural Rights, in F. Coomans & M.T. Kamminga (Eds.), Extraterritorial Application of Human Rights Treaties, pp. 192–193 and S. Joseph (2011), Blame It on the WTO? A Human Rights Critique, pp. 250–252.

¹⁷⁸ See J. Ziegler (2005), Report of the Special Rapporteur on the Right to Food, UN Doc. E/CN.4/2005/47, para. 52.

ESCR. Sanctions may legitimately restrict ESCR, but restrictions must be consistent with the general limitation clause in Article 4 ICESCR. ¹⁷⁹

The extraterritorial obligation *to protect* Covenant rights requires states parties to ensure that the ESCR of people living in other countries are not jeopardised by third parties (citizens or multinational corporations) subject to their jurisdiction. ¹⁸⁰ It will have to be acknowledged that the protection of IP rights through TRIPS generally benefits multinational corporations "domiciled" in rich countries and tends to increase their power over people and their ESCR in other countries where they or their subsidiaries operate. It has been observed:

International trade law indirectly empowers private traders, particularly multinational corporations ... and yet provides for no corresponding duties. ... In enhancing corporate power, WTO law adds to a systemic human rights problem, in that the power of many multinationals is enormous and perhaps on occasion greater than that of some (particularly developing) States, rendering it difficult for those States to appropriately regulate those entities. Given such circumstances, perhaps it is desirable that home States, which are normally developed States, be required to close accountability gaps by regulating the offshore activities of their companies and protecting offshore people from corporate practices that harm human rights. ¹⁸¹

Finally, states parties to the ICESCR have extraterritorial obligations *to fulfil* ESCR. Extraterritorial obligations to fulfil are implicated by the use of the words "individually and through international assistance and cooperation" in Article 2 (1) ICESCR, when describing the obligation of states parties to use maximum resources to progressively realise ESCR. ¹⁸² The obligation to fulfil entails both an obligation to facilitate and an obligation to provide. Whereas the latter requires

¹⁷⁹In this sense, see Principle 22 of the Maastricht Principles on Extraterritorial Obligations of States in the Area of Economic, Social and Cultural Rights.

¹⁸⁰ See J. Ziegler (2005), Report of the Special Rapporteur on the Right to Food, UN Doc. E/CN.4/2005/47, para. 53. See also F. Coomans (2004), Some Remarks on the Extraterritorial Application of the International Covenant on Economic, Social and Cultural Rights, in F. Coomans & M.T. Kamminga (Eds.), Extraterritorial Application of Human Rights Treaties, pp. 193–195.

¹⁸¹ See S. Joseph (2011), Blame It on the WTO? A Human Rights Critique, pp. 252–253. Principle 24 of the Maastricht Principles states that "[a]ll States must take necessary measures to ensure that non-State actors which they are in a position to regulate, . . ., such as private individuals and organisations, and transnational corporations and other business enterprises, do not nullify or impair the enjoyment of economic, social and cultural rights". Principle 26 goes on to state that "States that are in a position to influence the conduct of non-State actors even if they are not in a position to regulate such conduct, . . ., should exercise such influence, . . ., in order to protect economic, social and cultural rights".

¹⁸² See also Principle 9 of the Maastricht Principles, stating that a state has obligations to fulfil ESCR in "c) situations in which the State, acting separately or jointly, whether through its executive, legislative or judicial branches, is in a position to exercise decisive influence or to take measures to realise economic, social and cultural rights extraterritorially, in accordance with international law".

providing assistance, according to available resources, when individuals are suffering in another country, the former requires states parties to act separately and jointly in creating an enabling environment that allows the realisation of ESCR. ¹⁸³ Formulating "equitable trade rules" and achieving "IP protection with a human face under TRIPS" refer to the obligation to facilitate rather than the obligation to provide. ¹⁸⁴ As has been highlighted by a UN expert with regard to the right to health:

Importantly, international assistance and cooperation should not be understood as encompassing only financial and technical assistance: it also includes a responsibility to work actively towards equitable multilateral trading, investment and financial systems that are conducive to the elimination of poverty and the realisation of the right to health. States should respect the enjoyment of the right to health in other jurisdictions, and ensure that no international trade agreement or policy impacts upon the right to health in other countries. They should also ensure that their representatives to international organisations, including WTO, take due account of the right to health, as well as the obligation of international assistance and cooperation, in all policy-making matters. ¹⁸⁵

The notion of states parties to the ICESCR being obliged to take separate and joint action towards creating an enabling environment that will facilitate the realisation of ESCR is also emphasised in Principle 29 of the Maastricht Principles on Extraterritorial Obligations of States in the Area of Economic, Social and Cultural Rights. This stipulates:

States must take deliberate, concrete and targeted steps, separately, and jointly through international cooperation, to create an international enabling environment conducive to the universal fulfilment of economic, social and cultural rights, including in matters relating to bilateral and multilateral trade, investment, taxation, finance, environmental protection, and development cooperation.

The compliance with this obligation is to be achieved through, inter alia:

- a) elaboration, interpretation, application and regular review of multilateral and bilateral agreements as well as international standards;
- b) measures and policies by each State in respect of its foreign relations, including actions
 within international organisations, and its domestic measures and policies that can
 contribute to the fulfilment of economic, social and cultural rights extraterritorially.

The reference to "deliberate, concrete and targeted steps" repeats the CESCR's words that, despite the fact that the full realisation of ESCR will take some time, there is an obligation to take action forthwith "to create an international enabling

¹⁸³ See J. Ziegler (2005), Report of the Special Rapporteur on the Right to Food, UN Doc. E/CN.4/2005/47, paras. 57 and 58, respectively. See also F. Coomans (2004), Some Remarks on the Extraterritorial Application of the International Covenant on Economic, Social and Cultural Rights, in F. Coomans & M.T. Kamminga (Eds.), Extraterritorial Application of Human Rights Treaties, pp. 155–159.

¹⁸⁴ See S. Joseph (2011), Blame It on the WTO? A Human Rights Critique, pp. 253–255.

¹⁸⁵ See P. Hunt (2004), Addendum to the Report of the Special Rapporteur on the Right to Health, UN Doc. E/CN.4/2004/49/Add.1, para. 28.

¹⁸⁶ Principle 29 complements Principles 15 and 17, referred to in Sect. 4 above.

environment". The content of Principle 29 is drawn not only from Article 2 (1) ICESCR, but also, for example, from Article 28 UDHR, stating that "[e]veryone is entitled to a social and international order in which the rights and freedoms set forth in [the UDHR] can be fully realised" or the UN Millennium Declaration of 2000, stating that states "resolve . . . to create an environment – at the national and global levels alike – which is conducive to development and to the elimination of poverty". ¹⁸⁷

7.2 The Supervisory System of the International Covenant on Economic, Social and Cultural Rights

The supervision of the implementation of rights under the ICESCR has been entrusted to the Committee on Economic, Social and Cultural Rights. This is a body composed of 18 members, who are experts with competence in the field of human rights, serving in their personal capacity. Unlike any of the treaty bodies under the other major UN human rights treaties, the CESCR has not been provided for in the treaty whose implementation it supervises. It is a subsidiary organ of the Economic and Social Council, one of the UN's main organs under the UN Charter. This implies that its mandate or composition may be more easily changed, as the

¹⁸⁷ See UN Millennium Declaration, UN Doc. A/RES/55/2 of 8 September 2000, para. 12. The CESCR has thus, in the context of states parties' obligation to realise the right to food, pointed out that the food crisis "also reflects failure of national and international policies to ensure physical and economic access to food for all" and that states parties should pay attention to the structural causes of the crisis, referring, amongst others, to aspects of the international trade regime in this regard. See CESCR, Statement: The World Food Crisis, UN Doc. E/C.12/2008/1 of 19 May 2008, paras. 9, 12 and 13. Reference may be made to the criteria developed by M. Salomon (2007), Global Responsibility for Human Rights: World Poverty and the Development of International Law, p. 193 (approvingly referred to by S. Joseph (2011), Blame It on the WTO? A Human Rights Critique, p. 260) for allocating responsibilities to states in creating a just international order. She identifies four indicators for determining responsibility; firstly, a state's contribution to the emergence of a problem (e.g. poverty having its roots in colonialisation), secondly, the relative power of a state at the international level (e.g. its influence within the WTO), thirdly, whether it is able to assist (e.g. its wealth), and, fourthly, the extent to which a state benefits from the distribution of global resources (e.g. the extent to which a state has benefited from WTO rules). ¹⁸⁸ See ECOSOC Resolution 1985/17. For a discussion of the supervisory system of the ICESCR, see, e.g., M. Craven (1998), The International Covenant on Economic, Social and Cultural Rights: A Perspective on Its Development, pp. 30-105; K. Arambulo (1999), Strengthening the Supervision of the International Covenant on Economic, Social and Cultural Rights: Theoretical and Procedural Aspects, pp. 23–49; or K.D. Beiter (2006), The Protection of the Right to Education by International Law: Including a Systematic Analysis of Article 13 of the International Covenant on Economic, Social and Cultural Rights, pp. 346–368.

procedure for amending a treaty need not be followed. Measures to strengthen the Committee as a supervisory organ are thus always conceivable.

Under Article 16(1) ICESCR, states parties accept the obligation to periodically submit reports "on the measures which they have adopted and the progress made in achieving the observance of the rights recognised [in the Covenant]". These reports are then considered by the Committee. 189 State representatives should be present at the meetings where their country's report is being examined, so as to facilitate "a constructive dialogue". 190 In practice, however, the procedure before the Committee has assumed a distinct quasi-judicial character, NGOs may, for example, submit written information in connection with any report under consideration, which is then made available to the state party concerned, and regarding which questions may be addressed to the state representatives. The Committee also provides opportunities for NGOs to provide oral information. ¹⁹¹ Following the consideration of a state report, the Committee adopts so-called "Concluding Observations". One section of these focuses on "principal subjects of concern". Whenever the Committee here "expresses its concern" at a state party's "performance", this is indicative of a violation of a Covenant provision. 192 The Committee actually follows up on "compliance with" its Concluding Observations, for example, by requesting relevant information to be included in the next report or to be submitted before the next report is due. It may even envisage sending one or two Committee members to a state party to gather relevant information there.

The importance of the CESCR adopting a "violations approach" to the ICESCR has often been emphasised. ¹⁹³ It has, in fact, adopted such an approach in the context of its various procedures, but this is now greatly facilitated by virtue of the fact that an Optional Protocol to the ICESCR, adopted in 2008, provides for a complaints procedure. Under Article 2, communications may be submitted by or on behalf of individuals or groups of individuals, claiming to be victims of a violation of a Covenant right by a state party. Article 10 further provides that a state party to

 $^{^{189}}$ For a description of the CESCR's working methods, see its Report on the 44th and 45th Sessions, UN Doc. E/2011/22 – E/C.12/2010/3, paras. 19–59.

¹⁹⁰ Ibid., para. 29.

 $^{^{191}}$ Ibid., paras. 52–54. Compare this to the restricted role NGOs can play in the context of the WTO. See Sect. 6.1 above.

¹⁹² See F. Coomans (1997), Stap voor stap: Naar een versterkt toezicht op de naleving van het Internationaal Verdrag inzake Economische, Sociale en Culturele Rechten, 22 NJCM-Bull. 1997, 555.
¹⁹³ See, e.g., A.R. Chapman (1996), A "Violations Approach" for Monitoring the International Covenant on Economic, Social and Cultural Rights, 18 Hum. Rts. Q. 1996, 23–66. A "violations approach" to the ICESCR is endorsed also in para. 72 of the Limburg Principles on the Implementation of the International Covenant on Economic, Social and Cultural Rights of 1987, published in (1987) 9 Hum. Rts. Q. 1987, 122–135, and in the Maastricht Guidelines on Violations of Economic, Social and Cultural Rights of 1997, published in (1998) 20 Hum. Rts. Q. 1998, 691–704. Both sets of guidelines were formulated by groups of experts.

the Protocol may at any time declare that it recognises the competence of the Committee to consider communications in which another state party claims that the former is not fulfilling its obligations under the Covenant. Communications can only be considered if submitted by a state party that itself has made such a declaration. The Protocol entered into force in 2013. Only 5 of 21 ratifying states have made declarations under Articles 10 and 11 so far. 195

Among the CESCR's further mechanisms, which include holding days of general discussion on relevant topics, organising consultations with UN bodies or independent experts or adopting statements on major international issues, that of adopting General Comments should be mentioned. General Comments are intended to clarify provisions of the Covenant or related topics. General Comments, though not legally binding, carry considerable legal weight. For purposes of interpreting the ICESCR, they constitute "any subsequent practice in the application of the treaty which establishes the agreement of the parties regarding its interpretation", to be taken into account, together with the context, in accordance with Article 31(3)(b) of the Vienna Convention on the Law of Treaties.

7.3 Extraterritorial State Obligations: The Role of the Committee on Economic, Social and Cultural Rights in the Context of TRIPS

Given its limited original mandate of "assisting" ECOSOC in supervising compliance with the ICESCR, the CESCR has, throughout the years of its existence, proven to be a highly competent supervisory body. It has autonomously developed its working methods, *inter alia* by introducing various quasi-judicial elements in its procedures (receiving "communications" from NGOs, directing Concluding Observations at states parties and adopting General Comments). Additionally, the Committee has started considering complaints alleging violations of ESCR under the

¹⁹⁴ The Committee is further competent, under Article 11, to conduct an inquiry upon receipt of reliable information attesting to grave or systematic violations of Covenant rights by a state party. The procedure, which is confidential, again can only be applied with regard to states parties that have recognised the Committee's competence in this regard.

¹⁹⁵ See UN Treaty Collection, available at https://treaties.un.org (accessed 27 August 2015).

¹⁹⁶ Reference has been made in the discussion so far to the Committee's General Comments Nos. 3, 8, 12, 13, 14, 17 and 21 on the nature of state obligations under the ICESCR, sanctions and ESCR, and the rights to food, education, health, "to benefit from the protection of the moral and material interests resulting from any scientific, literary or artistic production of which one is the author" and to take part in cultural life, respectively.

Optional Protocol recently. Seen in this light, the Committee is a competent body to play a role "in the WTO/TRIPS context".

Under the complaints mechanism, the Committee is, for example, able to deal with claims brought by individuals alleging that a state party violates ESCR through its IP system. Especially in those cases where the complaints procedure is not available, use should be made of the "unofficial" petition procedure alluded to above, i.e. NGOs should submit shadow reports, whenever state reports are to be considered by the Committee. The Committee is also competent to address claims by individuals alleging that their rights have been violated by the IP law and activities of *another* state party. 197 It is conceivable, for instance, that, in appropriate circumstances, a claim be brought by persons affected by HIV/AIDS in a poor country without access to affordable medication against a rich country refusing to grant a compulsory licence for the manufacture of generic medicines for export to the former country. The Committee should be bold enough to describe infringements of ESCR as violations of the Covenant, even where national measures have been implemented in compliance with obligations under TRIPS. 198 In some situations, it may be preferable or the only option feasible for claims of violations of extraterritorial obligations under the Covenant to be raised in the form of interstate complaints (Article 10 of the Optional Protocol to the ICESCR). The Maastricht Principles on Extraterritorial Obligations of States in the Area of Economic, Social and Cultural Rights emphasise that "States should avail themselves of, and cooperate with, inter-State complaints mechanisms, including human rights mechanisms, to ensure reparation for any violation of an extraterritorial obligation relating to economic, social and cultural rights". 199 The Commentary to the Maastricht Principles stresses that a state's obligation to realise ESCR may, in fact, oblige it to pursue such measures to prevent and mitigate violations by other states

¹⁹⁷ This may be deduced from the Maastricht Principles on Extraterritorial Obligations of States in the Area of Economic, Social and Cultural Rights. Whereas Principle 39 provides that interstate complaints mechanisms should be relied upon where appropriate, Principle 37 makes it clear that states are principally required to "provide remedies to *the victim*" (own italics) and that "any state concerned" must provide remedies, i.e. the state in which the harmful conduct (by private actors or the state itself) took place or the state in which the harmful effects were suffered. See further Principle 9, stating that a state has obligations to comply with ESCR in "b) situations over which ... acts or omissions bring about foreseeable effects on the enjoyment of economic, social and cultural rights".

¹⁹⁸ Already in 2001, the CESCR thus commented that it "wishes to emphasise that national and international intellectual property regimes must be consistent with the obligation of States parties to ensure the progressive realisation of full enjoyment of all the rights in the [ICESCR]" and further that "any intellectual property regime that makes it more difficult for a State party to comply with its core obligations in relation to health, food, education, especially, or any other right set out in the [ICESCR], is inconsistent with the legally binding obligations of the State party". See CESCR, Statement: Human Rights and Intellectual Property, UN Doc. E/C.12/2001/15 of 14 December 2001, paras. 11 and 12, respectively.

¹⁹⁹ See Principle 39 of the Maastricht Principles.

that affect its inhabitants.²⁰⁰ To the extent that the interstate complaints procedure under the Optional Protocol to the ICESCR is not available, *ad hoc* international arbitration established by the parties to a dispute may constitute an alternative.²⁰¹ Claims before the Committee may further potentially target the conduct of states parties within the WTO, for example, their voting in favour of a policy that clearly conflicts with ESCR, or their playing a pivotal role in defeating the initiative of other WTO members to have a human rights "safeguard declaration" adopted. Similarly, claims could be brought against states parties frustrating attempts at amending TRIPS provisions (if) irreconcilable with Covenant provisions, or against states parties adopting TRIPS-plus agreements that are in conflict with rights under the Covenant.

In its work so far, the Committee has variously confirmed that states parties are the bearers of extraterritorial obligations under the ICESCR. In its General Comments, the Committee has thus pointed out that states parties have an obligation to ensure that their actions as members of international organisations take due account of ESCR. ²⁰² The Committee has similarly made it clear with regard to the right to health (as with regard to other ESCR) that "... [i]n relation to the conclusion of other international agreements, States parties should take steps to ensure that these instruments do not adversely impact upon the right to health", and that "[v]iolations of the obligation to respect ... include ... the failure of the State to take into account its legal obligations regarding the right to health when entering into bilateral or multilateral agreements with other States, international organisations and other entities, such as multinational corporations". ²⁰³ In its Concluding

²⁰⁰ See O. De Schutter et al. (2012), Commentary to the Maastricht Principles on Extraterritorial Obligations of States in the Area of Economic, Social and Cultural Rights, 34 Hum. Rts. Q. 2012, 1165–1166.

²⁰¹ Ibid., 1165–1166. Though interstate complaints procedures have not played any role in the work of the UN human rights bodies so far, this may change with the increased significance of extraterritorial obligations in IHRL.

²⁰² See CESCR, General Comment No. 13, The Right to Education (Art. 13 ICESCR), UN Doc. E/2000/22, para. 56, and General Comment No. 14, The Right to the Highest Attainable Standard of Health (Art. 12 ICESCR), UN Doc. E/2001/22, para. 39.

²⁰³ See CESCR, General Comment No. 14, The Right to the Highest Attainable Standard of Health (Art. 12 ICESCR), UN Doc. E/2001/22, paras. 39 and 50, respectively. See also CESCR, General Comment No. 12, The Right to Adequate Food (Art. 11 ICESCR), UN Doc. E/2000/22, paras. 19 and 36. Para. 19 states "[v]iolations of the right to food can occur through the direct action of States ... These include: ... the failure of a State to take into account its international legal obligations regarding the right to food when entering into agreements with other States or with international organisations". Para. 36 states "[s]tates parties should, in international agreements whenever relevant, ensure that the right to adequate food is given due attention...". See further CESCR, General Comment No. 13, The Right to Education (Art. 13 ICESCR), UN Doc. E/2000/22, which, at para. 56, states that "[i]n relation to the negotiation and ratification of international agreements, States parties should take steps to ensure that these instruments do not adversely impact upon the right to education".

Observations, ²⁰⁴ the Committee has repeatedly reminded states parties that their "obligations under the Covenant should be taken into account in all aspects of ... negotiations with [or within the framework of] international ... institutions, like ... the World Trade Organisation, to ensure that economic, social and cultural rights, particularly of the most vulnerable groups, are not undermined". ²⁰⁵ Focusing on IP rights, Committee observations have been of two kinds so far: The Committee either "[encouraged] [a] State party to provide greater access to generic medicine making use of the flexibility clauses permitted in [TRIPS]" (so as to ensure compliance with "domestic" obligations), or it expressed criticism at TRIPS-plus agreements (non-compliance with extraterritorial obligations). With regard to Switzerland, the Committee thus stated that the state party was obliged to ensure TRIPS-plus provisions would not adversely affect access to medicines in partner countries, compromising the right to health, or increase food production costs, undermining the realisation of the right to food. ²⁰⁷

This overview of the Committee's work shows, first of all, that, whereas extraterritorial obligations to respect ESCR feature more "clearly" in Committee practice, extraterritorial obligations to protect and fulfil are "still largely undefined and consequently weak". It also shows that, so far, the Committee has refrained from commenting on conflicts between TRIPS (itself) and the ICESCR in any detail. Regarding the latter, this may have to do with the reluctance of international tribunals to resolve conflicts existing between the rules they are required to enforce and those of

²⁰⁴ The CESCR's reporting guidelines (Guidelines on Treaty-Specific Documents to be Submitted by States Parties under Articles 16 and 17 of the International Covenant on Economic, Social and Cultural Rights, Annex, UN Doc. E/C.12/2008/2 of 24 March 2009) provide that "[i]n relation to the rights recognised in the Covenant, [reports] should indicate . . . [m]echanisms in place to ensure that a State party's obligations under the Covenant are fully taken into account in its actions as a member of international organisations and international financial institutions, as well as when negotiating and ratifying international agreements, in order to ensure that economic, social and cultural rights, particularly of the most disadvantaged and marginalised groups, are not undermined". See para. 3(c).

²⁰⁵ See CESCR, Concluding Observations on Egypt, UN Doc. E/C.12/1/Add.44 of 23 May 2000, para. 28. See also CESCR, Concluding Observations on Morocco, UN Doc. E/C.12/1/Add.55 of 1 December 2000, para. 38, or CESCR, Concluding Observations on Algeria, UN Doc. E/C.12/1/Add.71 of 30 November 2001, para. 43.

²⁰⁶ See CESCR, Concluding Observations on Chile, UN Doc. E/C.12/1/Add.105 of 1 December 2004, para. 60. See also CESCR, Concluding Observations on Ecuador, UN Doc. E/C.12/1/Add.100 of 7 June 2004, para. 55.

²⁰⁷ See CESCR, Concluding Observations on Switzerland, UN Doc. E/C.12/CHE/CO/2-3 of 26 November 2010, para. 24. When considering state reports submitted by the Netherlands, the Committee "expressed its concern" "over the adverse impact on the enjoyment of the right to health resulting from the seizure in the Netherlands by the State party of consignments of generic medicine consistent with [TRIPS] being shipped from one developing country to another...". See CESCR, Concluding Observations on the Netherlands, UN Doc. E/C.12/NDL/CO/4-5 of 9 December 2010, para. 28.

²⁰⁸ See F. Coomans (2011), The Extraterritorial Scope of the International Covenant on Economic, Social and Cultural Rights in the Work of the United Nations Committee on Economic, Social and Cultural Rights, 11 Hum. Rts. Law Rev. 2011, 34.

another body of international law. In this respect, the Committee needs to be sufficiently bold to deal with such conflicts. Regarding the lack of clarity on extraterritorial obligations to protect and fulfil, this has to do with the nature of the reporting procedure, which does not facilitate discussing extraterritorial obligations in depth. It is, therefore, necessary for the Committee to further develop the notion of extraterritorial obligations by adopting a General Comment elaborating on the nature of extraterritorial obligations under the ICESCR.²⁰⁹ At some point, it might adopt a General Comment on this topic focusing specifically on the WTO/TRIPS context.

But, it is necessary also to think about ways the CESCR and the WTO may collaborate. Some time back, with the World Bank and the International Monetary Fund in mind, the suggestion was made that an independent expert body be established within the UN Commission on Human Rights (now the UN Human Rights Council) to deal with complaints alleging that these institutions had violated their obligation to respect under IHRL. It should have had competences to investigate, give opinions and decide on reparations.²¹⁰ The question is whether such a body is conceivable with regard to the WTO. Unlike the World Bank and the IMF, the WTO is not a UN specialised agency, of course. But, as has recently been suggested by the UN's Independent Expert on the Promotion of a Democratic and Equitable International Order, "States should ensure more democratic and equitable participation of all States in ... the [WTO] for instance by placing [it] under the authority of the [UN] and subordinating [it] to the Purposes and Principles of the [UN] Charter, pursuant to Articles 57 and 63". 211 If this should materialise, it is conceivable that the mandate of the CESCR-being a creature of ECOSOC-be readily amended to enable the Committee to deal with complaints alleging that the WTO (World Bank or IMF, etc.) as an international organisation has failed to observe its obligation to respect ESCR. The Committee would thus assume a task additional to supervising implementation of the ICESCR by states parties thereto. In any event, ECOSOC/the CESCR and the WTO should conclude a co-operation agreement, detailing the ways in which the Committee—as an international body with competence in the field of ESCR—may contribute to the observance of such rights within the WTO. Provision could accordingly be made for the submission of expert opinions by the Committee to WTO organs, notably any dispute settlement body, on request. Alternatively, Committee members might be requested to serve on WTO dispute settlement bodies in appropriate cases in one capacity or another. One could also make provision for dispute settlement bodies, composed of WTO and CESCR adjudicators, to be set up in certain instances to deal with "special cases", for instance, those where a WTO member raises a defence based on ESCR to a claim of infringement of obligations under a WTO agreement.

²⁰⁹ Ibid., 35.

²¹⁰ See S.I. Skogly (2001), The Human Rights Obligations of the World Bank and the International Monetary Fund, p. 188.

²¹¹ See A.-M. de Zayas (2013), Report of the UN Independent Expert on the Promotion of a Democratic and Equitable International Order, UN Doc. A/HRC/24/38 of 1 July 2013, para. 55(c).

8 Conclusion

Human rights can and must play a role in the way TRIPS is interpreted, implemented and developed further. It is true, TRIPS does not reflect a human rights approach since it relegates human rights concerns to narrow exceptions to proprietary interests. Even so, TRIPS cannot be considered a "closed system". The WTO, as an international organisation, is obliged to respect many human rights protected under IHRL. WTO members themselves have obligations of an extraterritorial character under various human rights treaties, including the ICESCR, requiring them, for example, to refrain from taking action within the WTO that violates human rights in other countries. At the same time, they are obliged to take separate and joint action, also within the WTO, towards creating an international enabling environment conducive to the fulfilment of human rights. Where conflicts exist between TRIPS and IHRL, these should, as far as possible, be resolved by an application of the rules of treaty interpretation under customary international law (as codified in Article 31 of the Vienna Convention on the Law of Treaties). Article 31(3)(c) gives expression to the principle of "systemic integration" in terms of which TRIPS would have to be read in the light of applicable IHRL. If conflicts prove difficult to resolve by way of a "harmonious interpretation" of the norms concerned, IHRL would, in accordance with "accepted hierarchies in international law" (peremptory norms, obligations erga omnes, non-derogable rights, Article 103 UN Charter, etc.), often have to be accepted to take precedence over TRIPS. The WTO's dispute settlement bodies should not only follow the approach as outlined, but also, where relevant, allow human rights defences to be raised where infringements of TRIPS are alleged. But also the CESCR, monitoring state compliance with the ICESCR, whose rights, ESCR, are particularly prone to be violated by action under TRIPS, should actively promote conformity between TRIPS and IHRL. It should adopt a more proactive approach in defining extraterritorial obligations under the ICESCR, also in relation to WTO law, for example in one or more General Comments, and it should further clearly identify instances where aspects of the TRIPS regime or state action taken under it infringe ESCR as violations of the Covenant. Moreover, collaboration between the WTO dispute settlement bodies and the CESCR may be enhanced in various ways so that the Committee's expertise may benefit the cause of ESCR under TRIPS.

Ideally, of course, TRIPS should be amended to make it reflect human rights concerns more thoroughly—and there may be stated to be an obligation for states under IHRL to have TRIPS revised as required. Yet, it is probably wishful thinking to expect WTO members to amend TRIPS. Where an international organisation serves as a forum for states to negotiate ever more favourable trade rules ultimately aimed at the accumulation of wealth, those involved will just see "the silver" and "lose sight of persons and their rights". It is precisely for this reason that the WTO, even if TRIPS (and the other WTO agreements) are, in fact, amended, should not become involved in the active implementation of human rights, for example, by devising policies directed at realising human rights or by considering communications alleging human rights violations. This would merely result in human rights law being subjected to economic

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rationales. Formulating international policies on and adjudicating on the alleged infringement of human rights is the responsibility of other competent international organisations and bodies. Hence, as has been emphasised by an eminent scholar, "the merger and acquisition of human rights by trade law should be resisted".²¹²

References

- Akehurst, M. (1975), The Hierarchy of the Sources of International Law, 47 BYIL 1975, 273, Oxford: Oxford University Press
- Alston, P. (1981), Prevention versus Cure as a Human Rights Strategy, in International Commission of Jurists (Ed.), Development, Human Rights and the Rule of Law, The Hague: International Commission of Jurists
- Alston, P. (2002), Resisting the Merger and Acquisition of Human Rights by Trade Law: A Reply to Petersmann, 13 EJIL 2002, 815, Firenze: European University Institute
- Alston, P. & Quinn, G. (1987), The Nature and Scope of States Parties' Obligations under the International Covenant on Economic, Social and Cultural Rights, 9 Hum. Rts. Q. 1987, 156, Baltimore: Johns Hopkins University Press
- Arambulo, K. (1999), Strengthening the Supervision of the International Covenant on Economic, Social and Cultural Rights: Theoretical and Procedural Aspects, Antwerpen/Groningen/Oxford: Intersentia
- Beiter, K.D. (2006), The Protection of the Right to Education by International Law: Including a Systematic Analysis of Article 13 of the International Covenant on Economic, Social and Cultural Rights, Leiden/Boston: Martinus Nijhoff Publishers
- Beiter, K.D. (2008), The Right to Property and the Protection of Interests in Intellectual Property: A Human Rights Perspective on the European Court of Human Rights' Decision in Anheuser-Busch Inc. v. Portugal, 39 IIC 2008, 714, Munich/Berlin: C.H. Beck/Springer
- Bhala, R. (1999), The Precedent Setters: *De facto Stare Decisis* in WTO Adjudication (Part Two of a Trilogy), 9 J. Transnat'l L. & Pol'y 1999, 1, Tallahassee: The Florida State University College of Law
- CESCR (1990), General Comment No. 3 (Fifth Session, 1990), UN Doc. E/1991/23, The Nature of States Parties' Obligations (Art. 2(1) ICESCR)
- CESCR (1997), General Comment No. 8 (Seventeenth Session, 1997), UN Doc. E/1998/22, The Relationship between Economic Sanctions and Respect for Economic, Social and Cultural Rights
- CESCR (1999), General Comment No. 12 (Twentieth Session, 1999), UN Doc. E/2000/22, The Right to Adequate Food (Art. 11 ICESCR)
- CESCR (1999), General Comment No. 13 (Twenty-First Session, 1999), UN Doc. E/2000/22, The Right to Education (Art. 13 ICESCR)
- CESCR (2000), Concluding Observations on Egypt, UN Doc. E/C.12/1/Add.44, 23 May 2000
- CESCR (2000), Concluding Observations on Morocco, UN Doc. E/C.12/1/Add.55, 1 December 2000
- CESCR (2000), General Comment No. 14 (Twenty-Second Session, 2000), UN Doc. E/2001/22, The Right to the Highest Attainable Standard of Health (Art. 12 ICESCR)
- CESCR (2000), Report on the 22nd, 23rd and 24th Sessions, UN Doc. E/C.12/2000/21
- CESCR (2001), Concluding Observations on Algeria, UN Doc. E/C.12/1/Add.71, 30 November 2001

²¹² See P. Alston (2002), Resisting the Merger and Acquisition of Human Rights by Trade Law: A Reply to Petersmann, 13 EJIL 2002, 815–844.

- CESCR (2001), Statement: Human Rights and Intellectual Property, Twenty-Seventh Session, UN Doc. E/C.12/2001/15, 14 December 2001
- CESCR (2004), Concluding Observations on Chile, UN Doc. E/C.12/1/Add.105, 1 December 2004
- CESCR (2004), Concluding Observations on Ecuador, UN Doc. E/C.12/1/Add.100, 7 June 2004 CESCR (2005), General Comment No. 17 (Thirty-Fourth and Thirty-Fifth Sessions, 2005), UN Doc. E/2006/22, The Right of Everyone to Benefit from the Protection of the Moral and Material Interests Resulting from any Scientific, Literary or Artistic Production of which he or she is the Author (Art. 15(1)(c) ICESCR)
- CESCR (2008), Statement: The World Food Crisis, Fortieth Session, UN Doc. E/C.12/2008/1, 19 May 2008
- CESCR (2009), General Comment No. 21 (Forty-Second and Forty-Third Sessions, 2009), UN Doc. E/2010/22, The Right of Everyone to take Part in Cultural Life (Art. 15(1)(a) ICESCR)
- CESCR (2009), Guidelines on Treaty-Specific Documents to be Submitted by States Parties under Articles 16 and 17 of the International Covenant on Economic, Social and Cultural Rights, Annex, UN Doc. E/C.12/2008/2, 24 March 2009
- CESCR (2010), Concluding Observations on the Netherlands, UN Doc. E/C.12/NDL/CO/4-5, 9 December 2010
- CESCR (2010), Concluding Observations on Switzerland, UN Doc. E/C.12/CHE/CO/2-3, 26 November 2010
- CESCR (2010), Report on the 44^{th} and 45^{th} Sessions, UN Doc. E/2011/22 E/C.12/2010/3
- CESCR (2012), Concluding Observations on Peru, UN Doc. E/C.12/PER/CO/2-4, 30 May 2012
- Chapman, A.R. (1996), A "Violations Approach" for Monitoring the International Covenant on Economic, Social and Cultural Rights, 18 Hum. Rts. Q. 1996, 23, Baltimore: Johns Hopkins University Press
- Chapman, A.R. (2009), Towards an Understanding of the Right to Enjoy the Benefits of Scientific Progress and Its Applications, 8 J. Hum. Rts. 2009, 1, Storrs: University of Connecticut
- Chon, M. (2007), Intellectual Property "from Below": Copyright and Capability for Education, 40 UC Davis L. Rev. 2007, 803, Davis: UC Davis School of Law
- Clapham, A. (2006), Human Rights Obligations of Non-State Actors, Oxford: Oxford University Press Clift, C. (2010), Why IPR Issues were brought to GATT: A Historical Perspective on the Origins of TRIPS, in C.M. Correa (Ed.), Research Handbook on the Protection of Intellectual Property under WTO Rules: Intellectual Property in the WTO, Vol. 1, Cheltenham/Northampton: Edward Elgar
- Coomans, F. (1997), Stap voor stap: Naar een versterkt toezicht op de naleving van het Internationaal Verdrag inzake Economische, Sociale en Culturele Rechten, 22 NJCM-Bull. 1997, 553, Leiden: Nederlands Juristen Comité voor de Mensenrechten Bulletin
- Coomans, F. (2004), Some Remarks on the Extraterritorial Application of the International Covenant on Economic, Social and Cultural Rights, in F. Coomans & M.T. Kamminga (Eds.), Extraterritorial Application of Human Rights Treaties, Antwerpen/Groningen/Oxford: Intersentia
- Coomans, F. (2011), The Extraterritorial Scope of the International Covenant on Economic, Social and Cultural Rights in the Work of the United Nations Committee on Economic, Social and Cultural Rights, 11 Hum. Rts. Law Rev. 2011, 1, Oxford: Oxford University Press
- Coombe, R.J. (1998), Intellectual Property, Human Rights and Sovereignty: New Dilemmas in International Law Posed by the Recognition of Indigenous Knowledge and the Conservation of Biodiversity, 6 Ind. J. Global Legal Stud. 1998, 59, Bloomington: Indiana University Maurer School of Law
- Craven, M. (1998), The International Covenant on Economic, Social and Cultural Rights: A Perspective on Its Development, Oxford: Clarendon Press
- Craven, M. (2007), The Violence of Dispossession: Extra-Territoriality and Economic, Social, and Cultural Rights, in M.A. Baderin & R. McCorquodale (Eds.), Economic, Social and Cultural Rights in Action, Oxford: Oxford University Press

- De Schutter, O. (2009), Interim Report of the Special Rapporteur on the Right to Food, The Right to Food Seed Policies and the Right to Food: Enhancing Agrobiodiversity and Encouraging Innovation, UN Doc. A/64/170, 23 July 2009
- De Schutter, O. (2011), Report of the Special Rapporteur on the Right to Food, Addendum, Guiding Principles on Human Rights Impact Assessments of Trade and Investment Agreements, UN Doc. A/HRC/19/59/Add.5, 19 December 2011
- De Schutter, O. et al. (2012), Commentary to the Maastricht Principles on Extraterritorial Obligations of States in the Area of Economic, Social and Cultural Rights, 34 Hum. Rts. Q. 2012, 1084, Baltimore: Johns Hopkins University Press
- De Wet, E. (2007), The Emerging International Constitutional Order: The Implications of Hierarchy in International Law for the Coherence and Legitimacy of International Decision-Making, 2 Potchefstroom Electronic Law Journal 2007, 1, Potchefstroom: North-West University
- De Wet, E. (2013), *Jus Cogens* and Obligations *Erga Omnes*, in D. Shelton (Ed.), The Oxford Handbook on International Human Rights Law, Oxford: Oxford University Press
- De Wet, E. & Vidmar, J. (2012), Conclusions, in E. De Wet & J. Vidmar (Eds.), Hierarchy in International Law: The Place of Human Rights, Oxford: Oxford University Press
- De Zayas, A.-M. (2013), Report of the UN Independent Expert on the Promotion of a Democratic and Equitable International Order, UN Doc. A/HRC/24/38, 1 July 2013
- Forman, L. (2011), An Elementary Consideration of Humanity? Linking Trade-Related Intellectual Property Rights to the Human Right to Health in International Law, 14 J. W. Intell. Prop. 2011, 155, Malden, MA: Wiley
- Geiger, C. (Ed.) (2015), Research Handbook on Human Rights and Intellectual Property, Cheltenham/Northampton: Edward Elgar
- Grosse Ruse-Khan, H. (2008), Proportionality and Balancing within the Objectives for Intellectual Property Protection, in P.L.C. Torremans (Ed.), Intellectual Property and Human Rights: Enhanced Edition of Copyright and Human Rights, 2nd ed., The Hague/London/New York: Kluwer Law International
- Gupta, R. (2010), Compulsory Licensing under TRIPS: How Far It Addresses Public Health Concerns in Developing Nations, 15 JIPR 2010, 357, New Delhi: The Council of Scientific & Industrial Research
- Haugen, H.M. (2007), The Right to Food and the TRIPS Agreement: With a Particular Emphasis on Developing Countries' Measures for Food Production and Distribution, Leiden/Boston: Martinus Nijhoff Publishers
- Helfer, L. (2008), The New Innovation Frontier? Intellectual Property and the European Court of Human Rights, in P.L.C. Torremans (Ed.), Intellectual Property and Human Rights: Enhanced Edition of Copyright and Human Rights, 2nd ed., The Hague/London/New York: Kluwer Law International
- Helfer, L. & Austin, G.W. (2011), Human Rights and Intellectual Property: Mapping the Global Interface, Cambridge: Cambridge University Press
- Hestermeyer, H.P. (2007), Human Rights and the WTO: The Case of Patents and Access to Medicines, Oxford: Oxford University Press
- Hunt, P. (2004), Report of the Special Rapporteur on the Right to Health, Addendum, UN Doc. E/CN.4/2004/49/Add.1
- Joseph, S. (2011), Blame It on the WTO? A Human Rights Critique, Oxford: Oxford University Press Kirby, M. (2011), Intellectual Property Law, Human Rights and the HIV/AIDS Pandemic: The Urgent Need for a Luther of Jurisprudence, 42 IIC 2011, 251, Munich/Berlin: C.H. Beck/Springer
- Koberstein, H. et al. (2013), Frontal 21, manuscript, contribution: "Überteuerte Medikamente: Die Ausrede der Pharmaindustrie", broadcast on ZDF (Zweites Deutsches Fernsehen) on 30 April 2013
- Koskenniemi, M. (2006), Fragmentation of International Law: Difficulties Arising from the Diversification and Expansion of International Law, Report of the Study Group of the International Law Commission, UN Doc. A/CN.4/L.682, 13 April 2006, International Law Commission, 58th Session
- Künnemann, R. (2004), Extraterritorial Application of the International Covenant on Economic, Social and Cultural Rights, in F. Coomans & M.T. Kamminga (Eds.), Extraterritorial Application of Human Rights Treaties, Antwerpen/Groningen/Oxford: Intersentia

- Kur, A. & Levin, M. (Eds.) (2011), Intellectual Property Rights in a Fair World Trade System: Proposals for Reform of TRIPS, Cheltenham/Northampton: Edward Elgar
- Langford, M. et al. (Eds.) (2014), Global Justice, State Duties: The Extraterritorial Scope of Economic, Social and Cultural Rights in International Law, Cambridge: Cambridge University Press
- Limburg Principles on the Implementation of the International Covenant on Economic, Social and Cultural Rights of 1987, published in (1987) 9 Hum. Rts. Q. 1987, 122, Baltimore: Johns Hopkins University Press
- Linton, S. & Tiba, F.K. (2008–2009), The International Judge in an Age of Multiple International Courts and Tribunals, 9 Chi. J. Int'l L. 2008–2009, 407, Chicago: University of Chicago
- Lumina, C. (2008), Free Trade or Just Trade? The World Trade Organisation, Human Rights and Development (Part 1), 12 Law, Democracy & Development 2008, 20, Bellville: University of the Western Cape
- Lumina, C. (2010), Free Trade or Just Trade? The World Trade Organisation, Human Rights and Development (Part 2), 14 Law, Democracy & Development 2010, 288, Bellville: University of the Western Cape
- Maastricht Guidelines on Violations of Economic, Social and Cultural Rights of 1997, published in (1998) 20 Hum. Rts. Q. 1998, 691, Baltimore: Johns Hopkins University Press
- McBeth, A. (2010), International Economic Actors and Human Rights, London/New York: Routledge Taylor and Francis Group
- McGinnis, J.O. (2003–2004), The Appropriate Hierarchy of Global Multilateralism and Customary International Law: The Example of the WTO, 44 Va. J. Int'l L. 2003–2004, 229, Charlottesville: University of Virginia School of Law
- Mottershaw, E. (2008), Economic, Social and Cultural Rights in Armed Conflict: International Human Rights Law and International Humanitarian Law, 12 Int'l J. Hum. Rts. 2008, 449, London: Taylor & Francis
- Nedelsky, J. (1996), Should Property be Constitutionalised? A Relational and Comparative Approach, in G.E. Van Maanen & A.J. Van der Walt (Eds.), Property Law on the Threshold of the 21st Century, Antwerp: Maklu
- Nicola, D. & Owoeyea, O. (2013), Using TRIPS Flexibilities to Facilitate Access to Medicines, 91 Bull. World Health Organ. 2013, 533, Geneva: World Health Organisation
- Okediji, R.L. (2006), The International Copyright System: Limitations, Exceptions and Public Interest Considerations for Developing Countries, Issue Paper No. 15, March 2006, International Centre for Trade and Sustainable Development and United Nations Conference on Trade and Development, available at: http://unctad.org/en/Docs/iteipc200610_en.pdf (accessed 27 August 2015)
- Oloka-Onyango, J. & Udagama, D. (2000), Report of the Special Rapporteurs of the (then) UN Sub-Commission on Human Rights on Globalisation and Its Impact on the Full Enjoyment of Human Rights, UN Doc. E/CN.4/Sub.2/2000/13
- Papadopoulou, F. (2011), TRIPS and Human Rights, in A. Kur & M. Levin (Eds.), Intellectual Property Rights in a Fair World Trade System: Proposals for Reform of TRIPS, Cheltenham/ Northampton: Edward Elgar
- Paulus, A. (2005), Jus Cogens in a Time of Hegemony and Fragmentation: An Attempt at a Re-Appraisal, 74 Nord. J. Int'l L. 2005, 297, Leiden: Brill
- Paulus, A. & Leiß, L. (2012), in B. Simma et al. (Eds.), The Charter of the United Nations: A Commentary, Vol. II, Article 103, 3rd ed., Oxford: Oxford University Press
- Pauwelyn, J. (2001), The Role of Public International Law in the WTO: How Far Can We Go?, 95 AJIL 2001, 535, Washington: ASIL
- Pauwelyn, J. (2005), Human Rights in WTO Settlement, in T. Cottier et al. (Eds.), Human Rights and International Trade, Oxford: Oxford University Press
- Penner, J.E. (1997), The Idea of Property in Law, Oxford: Oxford University Press
- Petersmann, E.-U. (2000), From "Negative" to "Positive" Integration in the WTO: Time for "Mainstreaming Human Rights" into WTO Law?, 37 CML Rev. 2000, 1363, Leiden: Universiteit Leiden

- Petersmann, E.-U. (2000), The WTO Constitution and Human Rights, 3 J. Int'l Econ. L. 2000, 19, Oxford: Oxford University Press
- Petersmann, E.-U. (2002), Human Rights in European and Global Integration Law: Principles for Constitutionalising the World Economy, in A. Von Bogdandy et al. (Eds.), European Integration and International Coordination: Festschrift für C.D. Ehlermann, The Hague/London/New York: Kluwer Law International
- Petersmann, E.-U. (2002), Time for a United Nations "Global Compact" for Integrating Human Rights into the Law of Worldwide Organisations: Lessons from European Integration, 13 EJIL 2002, 621, Firenze: European University Institute
- Petsche, M. (2010), *Jus Cogens* as a Vision of the International Legal Order, 29 Penn St. Int'l L. Rev. 2010, 233, Carlisle: Penn State University, Dickinson School of Law
- Salomon, M. (2007), Global Responsibility for Human Rights: World Poverty and the Development of International Law, Oxford: Oxford University Press
- Schermers, H.G. (1998), The Legal Bases of International Organisation Action, in R.-J. Dupuy (Ed.), A Handbook on International Organisations, 2nd ed., Leiden/Boston: Martinus Nijhoff Publishers
- Seiderman, I.D. (2001), Hierarchy in International Law: The Human Rights Dimension, Antwerpen/Groningen/Oxford: Intersentia Hart
- Shelton, D. (2014), International Law and "Relative Normativity", in M. Evans (Ed.), International Law, 4th ed., Oxford: Oxford University Press
- Simma, B. (1991), The Implementation of the International Covenant on Economic, Social and Cultural Rights, in F. Matscher (Ed.), The Implementation of Economic and Social Rights: National, International and Comparative Aspects, Kehl am Rhein: N.P. Engel Verlag
- Simma, B. & Alston, P. (1988–1989), The Sources of Human Rights Law: Custom, Jus Cogens, and General Principles, 12 Australian Yb. Int'l L. 1988–1989, 82, Acton: The Australian National University
- Skogly, S.I. (2001), The Human Rights Obligations of the World Bank and the International Monetary Fund, London/Sydney: Cavendish Publishing Limited
- Skogly, S.I. (2010), Extraterritoriality: Universal Human Rights Without Universal Obligations?, in S. Joseph & A. McBeth (Eds.), Research Handbook on International Human Rights Law, Cheltenham/Northampton: Edward Elgar
- Ssenyonjo, M. (2010), Economic, Social and Cultural Rights: An Examination of State Obligations, in S. Joseph & A. McBeth (Eds.), Research Handbook on International Human Rights Law, Cheltenham/Northampton: Edward Elgar
- Štrba, S.I. (2012), International Copyright Law and Access to Education in Developing Countries: Exploring Multilateral Legal and Quasi-Legal Solutions, Leiden/Boston: Martinus Nijhoff Publishers
- Teraya, K. (2001), Emerging Hierarchy in International Human Rights and Beyond: From the Perspective of Non-Derogable Rights, 12 EJIL 2001, 917, Firenze: European University Institute
- Thomas, C. (2004), Should the World Trade Organisation Incorporate Labour and Environmental Standards?, 61 Wash. & Lee L. Rev. 2004, 347, Lexington: Washington and Lee University School of Law
- Tomaševski, K. (1999), Preliminary Report of the Special Rapporteur on the Right to Education, UN Doc. E/CN.4/1999/49
- Tomaševski, K. (2004), Report of the Special Rapporteur on the Right to Education, UN Doc. E/CN.4/2004/45
- Torremans, P.L.C. (Ed.) (2008), Intellectual Property and Human Rights: Enhanced Edition of Copyright and Human Rights, 2nd ed., The Hague/London/New York: Kluwer Law International
- UN High Commissioner for Human Rights (2001), Report, The Impact of the Agreement on Trade-Related Aspects of Intellectual Property Rights on Human Rights, UN Doc. E/CN.4/ Sub 2/2001/13
- Van Banning, T.R.G. (2002), The Human Right to Property, Antwerpen/Groningen/Oxford: Intersentia

- Van den Bossche, P. (2010), NGOs and the WTO: Limits to Involvement?, in D.P. Steger (Ed.), Redesigning the World Trade Organisation for the Twenty-First Century, Waterloo, Ontario: Wilfrid Laurier University Press
- Van den Bossche, P. & Zdouc, W. (2013), The Law and Policy of the World Trade Organisation: Text, Cases and Materials, 3rd ed., Cambridge: Cambridge University Press
- Vidmar, J. (2012), Norm Conflict and Hierarchy in International Law: Towards a Vertical International Legal System?, in E. De Wet & J. Vidmar (Eds.), Hierarchy in International Law: The Place of Human Rights, Oxford: Oxford University Press
- Wolfrum, R. (2012), in B. Simma et al. (Eds.), The Charter of the United Nations: A Commentary, Vol. I. Article 1. 3rd ed., Oxford: Oxford University Press
- Xiong, P. (2012), An International Law Perspective on the Protection of Human Rights in the TRIPS Agreement: An Interpretation of the TRIPS Agreement in Relation to the Right to Health, Leiden/Boston: Martinus Nijhoff Publishers
- Yu, P.K. (2006–2007), Ten Common Questions about Intellectual Property and Human Rights, 23 Ga. St. U. L. Rev. 2006–2007, 709, Atlanta: George State University College of Law
- Yu, P.K. (2007), Reconceptualising Intellectual Property Interests in a Human Rights Framework, 40 UC Davis L. Rev. 2007, 1039, Davis: UC Davis School of Law
- Yu, P.K. (2012), Intellectual Property and Human Rights in the Nonmultilateral Era, 4 Fla. L. Rev. 2012, 1045, Gainesville: University of Florida
- Ziegler, J. (2005), Report of the Special Rapporteur on the Right to Food, UN Doc. E/CN.4/2005/47

Part V Exclusivity, Access and Innovation

From Transfer of Technology to Innovation Through Access

Peter Picht

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Abstract While, in a traditional perception, IP law is all about protection and exclusivity, recent developments such as the strategic use of standard-essential patents (SEPs) present access rather than exclusion as a key driver for innovation. Although standardization generates important benefits to society it does also entail substantial risks such as the abuse of SEPs. From an analysis of important SEP-related practices it becomes evident that they constitute an important context in which a new demand for access to proprietary technology arises. When TRIPS is put to their litmus test, the result is double-edged. On the level of its fundamental provisions TRIPS cannot only accommodate the need for access. With its goal to balance the interests of technology owners and those who urge for a right to use protected technology TRIPS is even in the position to foster fair access. However, specific provisions on access requirements, such as Article 31 TRIPS on compulsory licenses, prove unsatisfactory. Until reform is brought about, the existing set of provisions must be read appropriately.

Dr. Peter Picht, LL.M. (Yale) is Senior Research Fellow at the Max Planck Institute for Innovation and Competition.

P. Picht (⊠)

Max-Planck-Institute for Innovation and Competition, Munich, Germany e-mail: peter.picht@ip.mpg.de

1 Introduction

Technology transfer through and in exchange for the implementation of intellectual property (IP) protection—this trade-off lies at the roots of the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS)¹ and it is deeply entrenched in the Agreement's provisions (cf. Preamble and Articles 7, 8, 66). Vindicating, in its traditional interpretation, strong, exclusive IP rights, it was i.a. meant to support IP-based exporting industries mainly in the developed countries.² Today, however, the view on IP protection is changing in some respects, not least in countries heavily exporting IP-based goods. In an "overprotected" environment, access rather than exclusion is increasingly regarded as a key driver for innovation and prosperity.³ How does the TRIPS Agreement fit in with this paradigm shift?

This contribution discusses these questions with regard to technology standards and standard-essential patents (SEPs). This is not a random choice: Standards are an increasingly important phenomenon in markets that are heavily based on IP. 4 Pointedly, one might say that we are—at least with regard to ICT⁵ markets—living in an era of standardization. As we will see, standards can convey great benefits but they may also harm competition and, ultimately, society (cf. below Sect. 2.1). Since many of the potentially harmful effects of standardization result from a lack of access (on acceptable conditions) to standard-essential patents (cf. below Sect. 2.2), the "era of standardization" may also have to be made an "era of access". This is true not only within particular IP jurisdictions but also in a transnational dimension. From wherever standards originate, they are liable to have an impact on several countries' markets. Access to standardized and IP-protected technology is certainly key to the competitiveness of developing countries. But market participants in developed countries do suffer as well when standards access is made proprietary and restricted. In many jurisdictions, competition law (cf. below Sect. 3.2) as well as patent law (cf. below Sect. 3.3) instruments are being developed and used to achieve an acceptable level of access. Are they in line with the fundamental goals (cf. below Sect. 3.1) of TRIPS and its more specific provisions (cf. below Sects. 3.2.2 and 3.3.2)? Turning to a broader perspective (cf. below Sect. 4), do the results from this analysis indicate

¹ H. Ullrich (2004), Expansionist Intellectual Property Protection and Reductionist Competition Rules: A TRIPs-Perspective, J. Int'l Econ. L. 2004, 401; D. Gervais (2012), The TRIPS-Agreement: Drafting History and Analysis, No. 2.342.

²G.E. Evans (1994), Intellectual Property as a Trade Issue – The Making of the Agreement on Trade-Related Aspects of Intellectual Property Rights, 18 World Comp. L. Rev. 1994, 141 et seq.

Related Aspects of Intellectual Property Rights, 18 World Comp. L. Rev. 1994, 141 et seq.

³ Cf. for example G. Becker (2013), On Reforming the Patent System; R. Posner (2013), Patent Trolls.

⁴ T.P. Stoll (2014), Are You Still in? – The Impact of Licensing Requirements on the Composition of Standard Setting Organizations, Essays on the Economics of Patents, Standards, and Innovation, pp. 41 et seq.

⁵ Information and Communications Technology.

⁶ Another tool, not addressed by this contribution but at least potentially important, are SSO rules that require patent holders to display a certain conduct, such as disclosing SEPs, committing to FRAND licensing, etc.

that TRIPS allows for a more access-oriented approach to IP protection? May it even lead the way toward a transnational IP system that balances access and protection in a new way? Could it thereby spare developing countries the "overprotection phase" that developed countries are currently struggling to overcome?

2 Standards, Standard-Essential Patents and the Case for Access Rights

2.1 Benefits and Inherent Dangers of Standards and SEPs

Technology standards are created in two major ways: "De facto" standards result from the success of a company's technical solution in the market. Often as a result of prolonged and costly "standards wars", the products of the most successful competitor, together with the technological standard that they are based on, put the rival products out of the market. Collective standards, in contrast, are set in a consensual process by "standard setting organizations" (SSOs). 9 Beside independent experts, the competing participants of the respective market are the key members of these organizations. ¹⁰ At first sight one might wonder why competitors would engage in such close cooperation. The reason is that standard setting yields substantial positive effects which incentivize market participants to cooperate. One of these advantages is the avoidance of the aforementioned standards wars. Another is the possibility to standardize solutions which are technologically superior but which would not have stood a chance in an unstandardized market because they are not supported by a powerful market player. Furthermore, companies that base their production on the standard know that their goods will be compatible with complementary products, such as accessories. Finally, products with a shared technological base are attractive to consumers because they are easy to compare and combine. These and some other¹¹ positive effects of de jure standard setting also explain why courts and competition authorities tolerate and even appreciate standard setting 12

⁷ Famous examples for such standards wars are the VHS-Betamax battle or the fight HD-DVD vs. Blu-Ray; cf. P. Grindley (1995), Standards, Strategy and Policy, pp. 74 et seq.

⁸ This type of standard is oftentimes referred to as "de jure-standard". Importantly, however, such standards are sometimes, but not necessarily declared binding by an act of law. Even absent codification, collective standards can and do often dominate the markets for which they are set because of their wide acceptance by market participants.

⁹ American Bar Association Section of Antitrust Law (2004), Handbook on the Antitrust Aspects of Standards Setting, pp. 4 et seq.

¹⁰ Ibid

¹¹ For an overview, see P. Picht (2014), Strategisches Verhalten bei der Nutzung von Patenten in Standardisierungsverfahren aus der Sicht des europäischen Kartellrechts, pp. 179 et seq.

¹² Cf. e.g. U. S. Department of Justice & Federal Trade Commission (2007), Antitrust Enforcement and Intellectual Property Rights: Promoting Innovation and Competition, pp. 33 et seq.

although it could be seen as a cartel-like agreement of competitors to exclude alternative technical solutions from the market.¹³

For a number of markets, standard setting has become a powerful determinant. In the consumer electronics sector, for example, the rapid succession of product generations and high interoperability requirements necessitate a common technological base. In spite of this success, standard setting is not unreservedly "good", for it involves substantial risks to innovation-driven competition. One 14 of the major issues arises from the interaction between standards and patents on standardized technologies. Once a standard is implemented, market participants are (to a greater or lesser extent) "locked in" to it, i.e. they cannot easily switch to another technical solution without incurring costs and other disadvantages. ¹⁵ Due to this effect, a patent on (parts of) the standardized technologies—a so-called standard-essential patent (SEP)—vests its holder with far-reaching power: Enjoying exclusivity rights with regard to the patented technology she can, in principle, refuse access to the technology altogether or choose the conditions under which it is granted. ¹⁶ As access to the patented standard-essential technology equals access to the standard, SEP holders might control entire standard-based markets. In the course of the last two decades, a number of cases have driven home this point and demonstrated the need for legal intervention. The following section will give a short overview on three prominent subsets, namely patent ambushes, the enforcement of acquired SEPs by non-producing entities (NPEs), and OEM-patent wars in the telecommunications industry. This is, however, not to mean that those are the only questionable forms of conduct. Exclusive cross-licensing of SEPs, for instance, might harm competition as well.

2.2 Questionable Conduct Related to SEPs

2.2.1 Patent Ambushes

Patent ambush cases, such as *Rambus*, were most prominent in the early days of SEP-related competition law enforcement. During a standard-setting procedure by the standard setting organization (SSO) JEDEC, the software developer and

¹³ Agreements obliging the parties to use particular technologies can in fact violate Article 101 TFEU; cf. ECJ, IAZ v. Commission, joined cases C 96-110/82, EU:C:1983:310.

¹⁴ Another important aspect is the risk that the standard-setting process is used, by the participating competitors, to cover cartel agreements violating Article 101 TFEU. Cf. on these and further aspects P. Picht (2014), Strategisches Verhalten bei der Nutzung von Patenten in Standardisierungsverfahren aus der Sicht des europäischen Kartellrechts, pp. 183 et seq.

¹⁵ On lock-in, see e.g. J.S. Miller (2007), Standard Setting, Patents, and Access Lock-in: RAND Licensing and the Theory of the Firm, 40 Ind. L. Rev. 2007, 351.

¹⁶ P. Chappatte (2009), FRAND Commitments – The Case for Antitrust Intervention, 5 Euro. Comp. J. 2009, 319, 325 et seq.

licensor Rambus concealed its SEPs.¹⁷ Once the standard was implemented, Rambus disclosed its patents and demanded royalties that were higher than its pre-standardization rates. Fierce litigation between Rambus and various standard users ensued, as well as competition proceedings in both the US and the EU. In the EU, a Commitments Decision by the European Commission obliged Rambus to grant fair, reasonable, and non-discriminatory terms (FRAND)¹⁸ or even royalty free-licenses.¹⁹ In the US, however, an FTC²⁰ order to the same effect was quashed by the DC Circuit for failure to demonstrate the anticompetitive effect of high royalty rates.²¹

2.2.2 Enforcement of Acquired SEP by NPE

So far, patent ambush cases have not become as rampant as sometimes expected. This is even truer for competition law intervention²² against the exploitation of SEPs by non-practicing entities, often and less politely referred to as "patent trolls". In a widely noticed case, the EU Commission intervened against the non-practicing entity (NPE) IPCom that, after acquiring SEPs from Robert Bosch GmbH, refused to honor the FRAND commitment made by Bosch and demanded high royalties from standard users instead. As a result, IPCom renewed the commitment and formal competition proceedings never got going.²³ Nonetheless, to conclude from litigation counts that SEP trolling is negligible would be at least premature. Many NPE attacks on standard users are probably settled out of court²⁴ and never get the attention of competition authorities.

¹⁷ On the facts of the Rambus case, see Federal Trade Commission, In the Matter of Rambus Inc., Administrative Complaint of 18 June 2002, Docket No. 9302.

¹⁸ Fair, reasonable and non-discriminatory.

¹⁹ European Commission, Rambus, Decision of 9 December 2009, Case COMP/38.636.

²⁰ Federal Trade Commission.

²¹ Rambus Inc. v. FTC, 522 F. 3d 456 (D.C. Cir. 2008).

²² Private patent enforcement litigation by NPEs does, however, flourish; cf. F. Mueller (18 June 2013), Patent Firm IPCom settles with T-Mobile, will be more active in U.S. with ex-Hitachi Patents, FOSS Patents Blog Entry of 18 June 2013.

²³ European Commission (2012), Antitrust: Commission welcomes IPCom's public FRAND Declaration, press release of 10 December 2012, MEMO/09/549.

²⁴ For instance, the \$3 billion in licensing earnings reported by the NPE "Intellectual Ventures" do most likely result in large part from out of court-settlements; cf. A. Robertson (2014), The Ultimate Patent Troll is going to Trial against Google and Motorola, The Verge of 4 February 2014. As a further example for troll activity, see K. Finley (2014), World's Most Innovative Patent Troll sues the Government, WIRED of 15 January 2014.

2.2.3 SEP Wars in the Telecommunications Industry

Lack of volume or judicial preoccupation is certainly no characteristic feature of our third subset of cases: Telecommunications industry giants like Apple, Samsung, Motorola/Google or the Chinese newcomers Huawei and ZTE have started fierce legal battles based on their respective SEPs.²⁵ The attacking party's core argument in these struggles is usually that the opponent's products violate the SEP. The aim of the attack varies, however. Sometimes the SEP holder tries to enforce high royalty payments;²⁶ sometimes he tries to prevent the opponent from using the patented technology altogether.²⁷ Underlying these immediate goals, many of the cases seem to have an additional "strategic level".²⁸ It is hard to believe that flourishing high-tech companies fiercely fight over an alleged SEP violation only because royalty money may be made or lost and not because they have long-term market positions in mind.

As in the patent ambush cases, European competition authorities are quite critical towards SEP holders' claims, ²⁹ and this time they are joined not only by US antitrust agencies but also by US courts. ³⁰ It may be that the massive use of SEPs as a means for economic warfare made US judges realize that unfettered latitude for patent holders can, in the standardization context, harm innovation and the spirit of patent protection.

2.3 SEP Issues as a Case for Access Rights

Protection through exclusivity rights has been the patent system's long-established core tool. Rewarding and empowering the innovator was considered the appropriate incentive for fostering innovation. Standards-based markets and SEPs show that this concept has to be revised—at least for certain areas. In an archetypical patent-product-producer structure, a patent holder can realize, as it were, much of the

²⁵ See e.g. Microsoft Corp. v. Motorola, Inc., 696 F.3d 872 (W.D. Wash. 2013); Apple Inc. v. Samsung Electronics Co., Ltd., 735 F.3d 1352 (Fed. Cir. 2013); ECJ, Huawei Technologies, C-170/13, ECLI:EU:C:2015:477.

²⁶ E.g. Microsoft Corp. v. Motorola, Inc., 696 F.3d 872 (W.D. Wash. 2013).

²⁷ E.g. Apple Inc. v. Samsung Electronics Co., Ltd., 735 F.3d 1352 (Fed. Cir. 2013).

²⁸ Cf. on the background of the Huawei v. ZTE lawsuit fought between two (at least in part) government-controlled Chinese companies J. Drexl (2014), Zugang zu standardessenziellen Patenten als moderne Regulierungsaufgabe: Wie reagiert das EU-Kartellrecht auf Patentkriege zwischen chinesischen Unternehmen.

²⁹ Cf., for instance, European Commission (2012), Antitrust: Commission sends Statement of Objections to Samsung on Potential Misuse of Mobile Phone Standard-Essential Patents, press release of 21 December 2012.

³⁰ As an impressive example, see Judge Posner's ruling dismissing Motorola's SEP infringement action against Apple: Apple, Inc. v. Motorola, Inc., 869 F.Supp.2d 901 (N.D. Illinois, Eastern Division 2012).

patent's innovative potential single-handedly by producing and marketing goods which are based on the protected technology. Technologies that are integrated in generic standards, though, form part of a shared base whose innovative potential is subsequently tapped by a multitude of technologies and goods, A SEP holder would usually be unable to generate the same degree of innovation alone. Her blocking the use of the standard therefore tends to eliminate more innovative energy than she can deploy herself. Even if the patent holder generates large profits by producing exclusively on the basis of the standard or by demanding high SEP royalties, the innovation-incentivizing effect tends to be limited. This is because the chance of repeating a one patent-one product success is much higher than the chance of controlling an implemented standard via an SEP.³¹ The success of standards-based products, in contrast, is likely to fuel standards-based innovation and thereby standards-based competition. In a way, patent law's traditional exclusivity incentive needs to be limited on the lower, namely the standard level, in order to be safeguarded on the higher, standards-based level. Stating the issue from a different angle: Patent protection blocks competition by way of imitation in order to generate competition by way of substitution. 32 Since SEP-protected technology can hardly be substituted once lock-in has occurred, standard-based competition—and, for that matter, competition during the standard setting phase—need to be protected all the more.³³

The need to secure fair³⁴ access to standards becomes ever more pressing as the likelihood for SEP situations rises. In a globalizing economy shaped by rapid technological change, standards are of growing importance because they keep products interoperable and thereby globally marketable. At the same time, global patent density increases as patent protection expands rapidly in developing countries,³⁵ and companies patent even small innovative steps.³⁶ As a result, complex

³¹ An exception may apply with regard to subsequent generations of standards that are quite similar. A SEP on one of the standard generations is not then unlikely to catch subsequent generations as well.

³² J. Drexl (2011), Intellectual Property in Competition: How to Promote Dynamic Competition as a Goal, in J. Drexl et al. (Eds.), Common Ground for International Competition Law, pp. 210, 220. ³³ J. Drexl et al. (2006), Comments of the Max Planck Institute for Intellectual Property, Competition and Tax Law on the Directorate-General Competition Discussion Paper of December 2005 on the Application of Article 82 of the Treaty to Exclusionary Practices, IIC 2006, 558, 567 et seq. ³⁴ It is important to notice that "access" does not mean access regardless of its conditions but access on fair terms. Neither can standard users compete vigorously in the market if they have to pay suffocating royalties for standard-essential technologies. Nor do unrewarding licensing obligations foster the long-term readiness of SEP holders to invent and to make their inventions available for standardization.

³⁵ For instance, the annual rate of patents granted in China increased by a factor of 15 between 2001 and 2012; SIPO Annual Reports, Evolution of Granted Patents, available at http://documents.epo.org/projects/babylon/eponet.nsf/0/116E0662A216E8A4C125761000482C99/\$File/evolution_of_granted_patents_cn.gif.

³⁶ From an empirical point of view T.P. Stoll (2014), Are You Still in? – The Impact of Licensing Requirements on the Composition of Standard Setting Organizations, Essays on the Economics of Patents, Standards, and Innovation.

high-tech products—such as smartphones—make use of a multitude of standards and each of those standards can be covered by hundreds or even thousands of patents.³⁷ SEP stacking vests many players with the option to block or prey upon a standard and consequently such conduct is more likely to happen. The assumption that (alleged) SEPs are often weak³⁸ is of precious little help since market participants do usually not know whether a particular patent will hold in court. The resulting uncertainty may, together with the high risks and costs involved by an attack on the patent, cause market participants to accept supra-competitive royalties or to refrain from using the standard altogether.³⁹

By this time, it should be clear that the need for access to standards does not square with a developed/developing countries dichotomy. ⁴⁰ Standards are often implemented in large regions or even globally. Participants of the respective markets all need access, regardless from which country they operate. Certainly, standards-based production is particularly important for developing countries, which are large scale-producers of consumer goods. Yet, SEP holders may also be—and increasingly are ⁴¹—based in developing countries, not least because these countries are often home to thriving high-tech sectors. It is therefore anything but an extravagant idea that European, US or Japanese standard users will more and more frequently have to come to terms with the, say, Indian holder of an SEP. Traditional, "one-way" transfer of technology concepts blur into transnational markets populated by SEP holders and standard users, operating both from developing and developed countries.

³⁷ By way of example: 72 firms claim to hold in total 1,227 unique essential patents in ETSI's UMTS/3G standard; T.P. Stoll (2014), Are You Still in? – The Impact of Licensing Requirements on the Composition of Standard Setting Organizations, Essays on the Economics of Patents, Standards, and Innovation, pp. 42 et seq.

³⁸ Cf. also the unsettling estimates on the overall percentage of unjustly granted patents: J.R. Allison & M.A. Lemley (1998), Empirical Evidence on the Validity of Litigated Patents, AIPLA Qu. J. 1998, 185, 205 et seq.; T. Bausch (2007), Nichtigkeitsrechtsprechung in Patentsachen, p. IX; D. Harhoff et al. (2013), Patent Litigation in Europe, ZEW - Centre for European Economic Research Discussion Paper No. 13-072, find a wide range of revocation percentages (approx. 15 %-70 % for litigated revocation claims) in various European countries for the period of 2000–2008.

³⁹ On the reduction of patent challenges in patent thickets, see D. Harhoff, G. von Graevenitz & S. Wagner (2013), Conflict Resolution, Public Goods and Patent Thickets, CEPR Discussion Paper Series No. 9468.

⁴⁰ It therefore comes as no surprise that antitrust agencies of developing countries start to focus on SEP issues. An example is provided by the investigation of Ericsson's assertion of its SEP launched by the Competition Commission of India; Competition Commission of India Order under Sec. 26(1) of The Competition Act 2002 of 16 January 2014, Case No. 76/2013 – In Re Intex Technologies, Ltd., and Telefonaktiebolaget LM Ericsson (Publ), available at: http://www.cci.gov.in/May2011/OrderOfCommission/261/762013.pdf.

⁴¹ ECJ, Huawei Technologies, C-170/13, ECLI:EU:C:2015:477.

3 Can TRIPS Cope with the SEP-Related Need for Access?

3.1 Fundamental Level

TRIPS contains no specific rules on standard setting and SEPs. By way of implication, Articles 7, 8 and 40 TRIPS are core provisions for the fundamental level of our analysis. At first sight, Article 7 TRIPS seems to bode ill for an access-oriented approach since it proclaims "[t]he protection and enforcement of intellectual property rights" to be TRIPS' objectives. However, the article goes on to sketch the qualifications of this protection. IP protection, it says, "should contribute to the promotion of technological innovation and to the transfer and dissemination of technology, to the mutual advantage of producers and users of technological knowledge and in a manner conducive to social and economic welfare, and to a balance of rights and obligations". Hence, TRIPS does not guarantee an IP protection which is unlimited and exists for its own sake. It protects in order to achieve the goals stated in Article 7 TRIPS. IP protection must be questioned if it appears to harm rather than to further these goals.

Article 8(2) TRIPS drives home this point by stating: "Appropriate measures, provided that they are consistent with the provisions of this Agreement, may be needed to prevent the abuse of intellectual property rights by right holders or the resort to practices which unreasonably restrain trade or adversely affect the international transfer of technology". States can, we are thus told, actively limit IP protection if this protection is perverted into a means to harm TRIPS' goals.

Article 40 TRIPS deals with the anticompetitive use of IP licenses. Although this scope is much narrower than that of Articles 7 or 8 TRIPS, the provision does likewise contain a general principle and not a directly applicable rule. Although the program set out in Articles 7, 8 TRIPS for the licensing context, Article 40(1) TRIPS states that "licensing practices or conditions pertaining to intellectual property rights which restrain competition may have adverse effects on trade and may impede the transfer and dissemination of technology". No other international agreement before has spelled out as clearly that the use of intellectual property (licenses) can have a negative impact on the affected markets which ought not to be tolerated simply because protection had initially been granted. Instead and according to Article 40(2) TRIPS,

⁴² Cf., with a similar general view and a similar interpretation of Article 7, 8 TRIPS, Declaration on Patent Protection: Regulatory Sovereignty under TRIPS (Version 1.0 of 15 April 2014), published in 45 IIC 2014, 679.

 $^{^{43}}$ In more detail on the interrelation between the paragraphs of Article 40 TRIPS cf., Bakhoum and Conde Gallego (2015).

⁴⁴O.F. von Gamm (1997), TRIPS und das nationale Wettbewerbs- und Kartellrecht, in E. Niederleithinger (Ed.), Festschrift Lieberknecht, pp. 197, 203.

⁴⁵On the various proposals regarding the precise dogmatic relation between Articles 40 and 8 TRIPS, see O. Brand (2013), in J. Busche, P. Stoll & A. Wiebe (Eds.), TRIPS, Article 40, para. 12, with further references.

⁴⁶ Ibid., para. 7.

"nothing in [the] Agreement shall prevent Members from specifying in their legislation licensing practices or conditions that may in particular cases constitute an abuse of intellectual property rights having an adverse effect on competition in the relevant market". "A Member may adopt, consistently with the other provisions of this Agreement, appropriate measures to prevent or control such practices". Although this wording gives the Members much leeway for shaping their reaction to IP license abuse, ⁴⁷ it is read by many ⁴⁸ as an obligation to act in some way.

Denial of access to SEPs can violate the boundaries set by Articles 7, 8 and 40 TRIPS. 49 Trade restraints may be more of an indirect effect since access restrictions do not aim at the sale of patent-based goods but at their production in the first place. The "promotion of technical innovation", however, is directly and materially affected if standard setting can, due to the patent holder's conduct, not perform its function as a catalyst for standard-based technological progress. At the same time, such interference perturbs technology transfer both with regard to the protected technology itself and with regard to follow-up innovations. In consequence, Articles 7 and 8 TRIPS allow for measures that limit IP protection in order to secure access to standard-essential technologies. This result is confirmed and reinforced by Article 40 TRIPS. The provision is applicable because the SEP holder's licensing policy is a key tool for making strategic use of her patent. Refusing to license a SEP, discriminating between license seekers, or demanding supra-FRAND royalties can be anticompetitive and restrain technologytransferring trade—i.e. fulfill the two intervention requirements set out in Article 40(1) TRIPS.⁵⁰ On the process level Article 40 TRIPS makes another important contribution: As said, standards do not halt at national boundaries, and SEP abuse can have a global impact. The consultation mechanism set out in Article 40(3) and (4) TRIPS may provide a framework for coordinating the Members' national measures and transforming them into a supra-national SEP-strategy.

These SEP-specific results arguably indicate a broader principle: Today's markets generate new needs for access to protected technologies and TRIPS is, due to its built-in access friendliness, ready to accommodate them. ⁵¹ The following two parts will explore—with regard to SEP—how this principle detected on the fundamental level translates onto the level of directly applicable TRIPS provisions.

⁴⁷ Ibid., para. 23.

⁴⁸ H. Ullrich (2004), Expansionist Intellectual Property Protection and Reductionist Competition Rules: A TRIPs-Perspective, J. Int'l Econ. L. 2004, 401, 407; opposing that concept i.a. A. Heinemann (1995), Das Kartellrecht des geistigen Eigentums im TRIPS-Übereinkommen der Welthandelsorganisation, GRUR Int. 1995, 535, 538.

⁴⁹ In the same vein M. Bakhoum & B. Conde Gallego (2015), TRIPS and Competition Rules: From Transfer of Technology to Innovation Policy.

⁵⁰O. Brand (2013), in J. Busche & P. Stoll (Eds.), TRIPS, Article 40, paras. 27 et seq.

⁵¹ Arriving, in a broader perspective, at the same conclusion M. Bakhoum & B. Conde Gallego (2015), TRIPS and Competition Rules: From Transfer of Technology to Innovation Policy.

3.2 EU Competition Law and TRIPS

3.2.1 The Competition Law Approach in a Nutshell

Under EU competition law, on which this contribution focuses, a SEP holder can violate Article 102 Treaty on the Function of the European Union (TFEU) by denying access to its patent. ⁵² His granting access only on non-FRAND terms may constitute a violation as well, for instance if the patent holder has entered into a FRAND licensing commitment during the standard-setting process. ⁵³ Where the (non-)licensing conduct of the SEP holder is abusive the same is true for patent infringement litigation that aims at enforcing his strategy. ⁵⁴ The core remedy is an competition-law-based compulsory license which obliges the patent holder to grant access on a FRAND or royalty basis. ⁵⁵

3.2.2 The TRIPS Perspective

Article 31 is the main TRIPS provision on competition-law-based compulsory licenses. By specifying the requirements for such licenses Article 31(k) TRIPS implies that they may permit the use of protected technology "to remedy a practice determined [...] to be anti-competitive". Furthermore the provision acknowledges the "need to correct anti-competitive practices". Article 31(c) TRIPS confirms this position with regard to patents on semi-conductor technology. Although Article 31 (c) and (k) TRIPS do, in principle, favor compulsory licenses when they are

⁵²P. Picht (2013), Von eDate zu Wintersteiger – Die Ausformung des Art. 5 Nr. 3 EuGVVO für Internetdelikte durch die Rechtsprechung des EuGH, GRUR Int. 2013, 22; T. Körber (2013), Standardessentielle Patente, FRAND-Verpflichtungen und Kartellrecht, pp. 59 et seq. Cf. also ECJ, Microsoft v. Commission, T-201/04, EU:T:2007:289, paras, 649 et seq.

⁵³ On this and further types of abusive conduct P. Picht (2013), Von eDate zu Wintersteiger – Die Ausformung des Article 5 Nr. 3 EuGVVO für Internetdelikte durch die Rechtsprechung des EuGH, GRUR Int. 2013, 15 et seq.

⁵⁴T. Körber (2013), Standardessentielle Patente, FRAND-Verpflichtungen und Kartellrecht, pp. 72 et seq. Cf. also European Commission (2012), Antitrust: Commission sends Statement of Objections to Samsung on Potential Misuse of Mobile Phone Standard-Essential Patents, press release of 12 December 2012, IP/12/1448; European Commission (2013), Antitrust: Commission sends Statement of Objections to Motorola Mobility on Potential Misuse of Mobile Phone Standard-Essential Patents, press release of 6 May 2013, IP/13/406.

⁵⁵ P. Picht (2013), Von eDate zu Wintersteiger – Die Ausformung des Article 5 Nr. 3 EuGVVO für Internetdelikte durch die Rechtsprechung des EuGH, GRUR Int. 2013, 24 et seq.

⁵⁶The wording of Article 30 TRIPS ("exceptions to the exclusive right conferred by a patent") might cover compulsory licenses as well. However, the dichotomy of Article 31 TRIPS (dealing with licenses) and Article 30 TRIPS (dealing with other "exceptions") suggests that compulsory license remedies to SEP abuse should be based on Article 31 TRIPS. Cf. further S. Reyes-Knoche (2013), in J. Busche, P. Stoll & A. Wiebe (Eds.), TRIPS, Article 30, paras. 7 et seq.; Panel Report, Canada – Patent Protection of Pharmaceutical Products, WT/DS114/R, adopted 7 April 2000, DSR 2000:V, p. 2289; D. Gervais (2012), The TRIPS Agreement: Drafting History and Analysis, No. 2.342.

competition-law-based, they address three potential limitations to the general permission of competition-law-based licenses, namely determination of the competition violation, previous efforts to obtain a license, and remuneration.

Determination of Competition Violation

Article 31(k) TRIPS states that, if an competition violation by the patent holder is properly determined, Members are not obliged to require efforts to obtain a license previously to the grant of a compulsory license (Article 31(b) TRIPS). Nor must they limit the license predominantly to the domestic market (Article 31(f) TRIPS). For compulsory licenses on semi-conductor technology—unless they grant public non-commercial use—Article 31(c) TRIPS does even make proper determination of anticompetitive conduct a strict requirement.

Imputed thus with great importance, the "determination" must be the result of a "judicial or administrative process" (Article 31(c) and (k) TRIPS). Competition law enforcement generates three typical situations in this regard: If EU or national courts have ruled in a competition procedure that the conduct of an SEP holder is anticompetitive, the determination requirement is clearly met. Since TRIPS explicitly allows for "administrative processes", the same must be true for an EU Commission decision finding a competition violation. Less evident are situations where, in a patent infringement action brought by the SEP holder, a national court grants a competition-law-based compulsory license to the alleged patent infringer. According to general procedural principles in (at least) many Member States,⁵⁷ court rulings bind only the parties to the particular procedure. Could, from the TRIPS perspective, a jurisdiction grant compulsory licenses to other standard users based on a ruling with such limited binding power, especially since it results from patent and not from competition litigation? And could such licenses even be granted where the ruling was handed down in a state other than the license-granting state? At least in practice, the problem might be resolved because the SEP holder will grant licenses to all interested standard users in order to avoid subsequent defeats in court.

Previous Efforts to Obtain a License

Article 31(b) TRIPS states that a compulsory license may, in principle and except for cases of emergency, "only be permitted if, prior to such use, the proposed user has made efforts to obtain authorization from the right holder on reasonable commercial terms and conditions and that such efforts have not been successful

⁵⁷ As a sample, see for Spain Article 222 Ley de Enjuiciamiento Civil; for Germany § 325 Zivilprozessordnung; for Poland Article 366 Kodeks Post powania Cywilnego; for France Article 480 Nouveau Code de procédure civile.

within a reasonable period of time". Anticompetitive behavior being "determined" however, TRIPS Members are "not obliged" to require previous licensing attempts (Article 31(k) TRIPS).

In the EU, and in Germany in particular, licensing effort requirements for the grant of competition-law-based compulsory licenses are presently under intense discussion. In its *Orange Book* decision, ⁵⁸ the German Federal Supreme Court (Bundesgerichtshof—BGH) has established a mechanism which is quite onerous to the license-seeking party. ⁵⁹ Refusal to grant a FRAND license on the SEP constitutes, according to the BGH, a competition violation only if the potential licensee has previously submitted a binding offer to conclude a license agreement. The terms of the offer must be such as to render its refusal by the SEP holder anticompetitive. Furthermore, the license offer must be unconditional. *Inter alia* and at least in the interpretation of Orange Book by lower courts, this prevents a condition subsequently which terminates the licensee's contractual duties if the SEP is found to be invalid or not infringed. In stark contrast to this approach, the EU Commission has issued press statements which appear to sketch a much more licensee-friendly test. 60 Under this test, refusal to license violates Article 102 TFEU if the SEP holder has made a FRAND licensing commitment to the respective SSO and the license seeker is willing to negotiate license terms. What exactly constitutes sufficient "willingness" remains, as yet, open. Facing the evident contrast between the approaches of the BGH and the EU Commission, the Düsseldorf District Court (LG Düsseldorf) has stayed proceedings between the telecommunications hardware manufacturers Huawei and ZTE and has referred the issue of previous licensing efforts to the ECJ.⁶¹

The "not obliged" wording of Article 31(k) TRIPS is a cornerstone of TRIPS' view on the previous effort issue. Member jurisdictions do not have to, but they can

⁵⁸ BGH (2009), GRUR 2009, 694, in particular 695-697.

⁵⁹ For a more detailed critique, see H. Ullrich (2010), Comment on the German Federal Supreme Court Decision Orange Book Standard, IIC 2010, 337; D. Hötte (2009), Urteilsanmerkung zu BGH Orange-Book-Standard, MMR 2009, 686; G.-K. De Bronett (2009), Gemeinschaftsrechtliche Anmerkungen zum "Orange-Book-Standard"-Urteil des BGH, WuW 2009, 899; S. Barthelmeß & N. Gauß (2010), Die Lizenzierung standardessentieller Patente im Kontext branchenweit vereinbarter Standards unter dem Aspekt des Artikel 101 AEUV, WuW 2010, 626.

⁶⁰ European Commission (2012), Antitrust: Commission sends Statement of Objections to Samsung on Potential Misuse of Mobile Phone Standard-Essential Patents, press release of 12 December 2012, IP/12/1448; European Commission (2013), Antitrust: Commission sends Statement of Objections to Motorola Mobility on Potential Misuse of Mobile Phone Standard-Essential Patents, press release of 6 May 2013, IP/13/406. On the interpretation of the press releases' wording LG Düsseldorf (2013), GRUR Int. 2013, 547, 549; A. Verhauwen (2013), "Goldener Orange-Book-Standard" am Ende? – Besprechung zu LG Düsseldorf, Beschl. v. 21. 3. 2013 – 4 b O 104/12, GRUR 2013, 558, 559. On the parallel US approach P. Picht (2013), Von eDate zu Wintersteiger – Die Ausformung des Article 5 Nr. 3 EuGVVO für Internetdelikte durch die Rechtsprechung des EuGH, GRUR Int. 2013, 29.

 ⁶¹ LG Düsseldorf (2013), GRUR Int. 2013, 547; with background details A. Verhauwen (2013).
 "Goldener Orange-Book-Standard" am Ende? – Besprechung zu LG Düsseldorf, Beschl. v. 21.
 3. 2013 – 4 b O 104/12, GRUR 2013, 558.

make licensing efforts a prerequisite for granting a compulsory license. In this respect, the approaches of both the BGH and the Commission are clearly in line with TRIPS. Does "not obliged" also mean that member jurisdictions are entirely free in the shaping of their previous effort requirements? Articles 7 and 8 TRIPS champion access-friendliness in SEP-based lock-in situations. The same is true for Article 31(k) TRIPS since it lifts the strict previous effort-prerequisite in case of—properly determined—anticompetitive behavior. Moreover, Article 40(2) TRIPS highlights as problematic licensing conditions "preventing challenges to validity" of the licensed IP right. Hence it is, from a TRIPS viewpoint, surprising (to say the least) that German courts in the aftermath of *Orange Book* require license seekers to renounce from challenging an SEP's validity. All in all, excessive burdens on the seeker of an SEP license may not be in outright violation of TRIPS but they would run afoul of TRIPS' access-friendly approach. This consideration should guide Member jurisdictions in shaping their licensing effort requirements.

Remuneration

Article 31(h) TRIPS secures the patent holder adequate remuneration, depending mainly on "the economic value of the authorization" for the licensee. Article 31 (k) TRIPS integrates the "need to correct anti-competitive practices" into the gamut of aspects relevant for the determination of an adequate remuneration. Members are thus allowed to sanction SEP holders by granting compulsory license terms that compensate them below what would be FRAND, absent the competition violation. Without this very important modification to Article 31(h) TRIPS, anticompetitive licensing conduct might be essentially riskless, since the SEP holder could expect FRAND license terms even if sanctioned for competition violation. 63

3.3 Reconciling Patent Law Remedies and TRIPS

The previous discussion has revealed that, in sum, competition law remedies to SEP abuse are in line with, and even encouraged by TRIPS. Can the same be said for remedies based on patent law?

⁶² Article 40 TRIPS applies to court-ordered compulsory licenses as well; O. Brand (2013), in J. Busche, P. Stoll & A. Wiebe (Eds.), TRIPS, Article 40, para. 16.

⁶³ In detail on the appropriate shaping of compulsory SEP licenses P. Picht (2014), Strategisches Verhalten bei der Nutzung von Patenten in Standardisierungsverfahren aus der Sicht des europäischen Kartellrechts, pp. 519 et seq.

3.3.1 Patent Law Remedies

The lack of consensus on appropriate patent law tools for dealing with SEPs makes it hard to answer this question. First of all, it must be emphasized that remedies to excessive access refusal are, as yet and at least in Europe, heavily based on competition law. The US has a stronger tendency to remedy IP abuse by genuine IP law tools, such as misuse doctrines. Even there, however, competition law looms large in SEP matters. This situation is not altogether satisfactory since the scope of patent protection is a genuine patent law issue. Competition law rules and the case-by-case intervention of competition authorities may fight the symptoms but they are not apt to get down to their roots. It is patent law that must eventually tackle patent overprotection. Various existing or new patent law instruments have been proposed to fulfill this task. But none of these proposals has, as yet, gained broad acceptance.

Suffice it to name two prominent proposals: Hanns Ullrich's⁶⁵ protection-limiting FRAND declaration, and Robert Merges and Jeffery Kuhn's⁶⁶ standards estoppel both start from the SEP holder's course of action during the standard setting process. If the SEP holder has, in this process, declared to be willing to license on FRAND terms once the standard is implemented, he cannot afterwards deviate from this commitment. Merges and Kuhn (for the US jurisdiction) base this result on a modified version of general estoppel rules, thereby focusing more on the patent *holder* and her inconsistent conduct. Ullrich (for Europe, and Germany in particular) on the contrary, focuses more on the standard-essential *patent*. In his view, the FRAND commitment has modified the patent by limiting its exclusionary power. The patent holder can no longer interdict use of the standard, which includes use of his patent, on the basis of a FRAND license.⁶⁷

3.3.2 The TRIPS-Perspective

If these proposals were to become the accepted approach in their respective jurisdictions, would they be in line with TRIPS as well? To begin with, neither Merges and Kuhn nor Ullrich contend that the FRAND commitment establishes an ordinary licensing contract between the SEP holder and each standard user. Indeed,

⁶⁴ With a focus on copyright, see A. Katz & P.-E. Veel (2013), Beyond Refusal to Deal: A Cross-Atlantic View of Copyright, Competition, and Innovation Policies, 79 Antitrust L.J. 2013, 139.

⁶⁵ H. Ullrich (2010), Patente und technische Normen: Konflikt und Komplementarität in patentund wettbewerbsrechtlicher Sicht, in M. Leistner (Ed.), Europäische Perspektiven des Geistigen Eigentums, pp. 14, 85 et seq.

⁶⁶ R. Merges & J. Kuhn (2009), An Estoppel Doctrine for Patented Standards, Cal. L. Rev. 2009, 21 et seq.

⁶⁷ H. Ullrich (2010), Patente und technische Normen: Konflikt und Komplementarität in patentund wettbewerbsrechtlicher Sicht, in M. Leistner (Ed.), Europäische Perspektiven des Geistigen Eigentums, pp. 14, 85 et seq.

even the concept of an imputed licensing contract seems hard to defend with regard to standard users outside the SSO, standard users that is with whom the SEP holder may never have come into direct contact. Absent a licensing contract limiting, as permitted by Article 28(2) TRIPS,⁶⁸ the initial exclusionary power of the patent on a secondary, contractual level, the proposals affect the fundamental guarantee of this exclusionary power by Article 28(1) TRIPS.⁶⁹

Article 30 TRIPS may permit a restriction since it states that member jurisdictions can "provide limited exceptions to the exclusive rights conferred by a patent". A look at widely accepted "exceptions" under Article 30 TRIPS shows, however, that a far-reaching right to use SEPs would establish a new category of exception. In particular, such right to use is not covered by the "*Bolar* exception", ⁷⁰ permitting a generics manufacturer to undertake R&D activity regarding a substance that is still patent protected. Nor does it constitute prior use or non-profit use for research or educational purposes. ⁷¹ On the contrary, the use of SEPs by market participants is bound to generate substantial revenues, thereby exploiting the economic potential of the SEP which, in principle, belongs to the patent holders. It is this economic impact which distinguishes the proposed patent law remedies from time-honored "exceptions" and which may militate against their being based on Article 30 TRIPS unless the scope of this article is widened. ⁷²

Assuming—at least for the sake of further analysis—inapplicability of Article 30 TRIPS, the patent-law-based obligation of the SEP holder to permit FRAND use could be interpreted as a compulsory license. Hence, Article 31 TRIPS comes into play. A remedy that is based on genuine patent law must work independently from the judicial or administrative determination of a competition violation. Absent such determination, however, Article 31(c) and (k) TRIPS do no longer reduce the TRIPS requirements for the grant of compulsory licenses. The then applicable provisions in Article 31(b) and (f) TRIPS might not prove to be insurmountable obstacles—patent law will usually grant compulsory licenses only for its own jurisdiction (Article 31(b) TRIPS) and Members usually require a certain degree of previous licensing efforts even for competition law remedies although they are "not obliged" to do so under Article 31(k) TRIPS. Article 31(c) TRIPS, though, traps the compulsory license approach: For lack of a "determined" competition

 $^{^{68}}$ Article 28(2) TRIPS reads: "Patent owners shall also have the right to [...] conclude licensing contracts".

⁶⁹ Article 28(1) TRIPS reads: "A patent shall confer on its owner the following exclusive rights: (a) where the subject matter of a patent is a product, to prevent third parties not having the owner's consent from the acts of: making, using, offering for sale, selling, or importing for these purposes that product".

 $^{^{70}}$ D. Gervais (2012), The TRIPS-Agreement: Drafting History and Analysis, No. 2.342.

⁷¹ On those and further "exceptions" under Article 30 TRIPS, see S. Reyes-Knoche (2013), in J. Busche, P. Stoll & A. Wiebe (Eds.), TRIPS, Article 30, paras. 27 et seq.

⁷² With proposals for a more generic application of Article 30 TRIPS, see Declaration on Patent Protection: Regulatory Sovereignty under TRIPS (Version 1.0 of 15 April 2014), esp. paras. 22 et seq.

violation, patent law alone could not grant the right to commercially use semiconductor technologies. This is inacceptable since semiconductor standards have proven vulnerable to doubtful SEP-holder conduct. From a more general perspective the result demonstrates that Article 31(c) TRIPS does not adequately balance patent exclusivity and the need for access in today's semi-conductor markets.

Our *tour d'horizon* has revealed difficulties to reconcile patent-law-based remedies to SEP misconduct with the structure of TRIPS. Since a revision of TRIPS is unlikely to happen in the near future, they will have to be resolved by an adequate construction of both TRIPS and the patent law remedies themselves. Future court practice and academic discussion will have to work out the details. With Article 31 TRIPS being partly ineffective and Article 30 TRIPS possibly overstretched as a basis for widespread rights to commercial use of SEPs, Article 28(1) TRIPS may provide a solution. True, a patent shall confer an exclusive right and Article 28 (1) makes no explicit exception for SEPs. At least if the patent holder has made a FRAND-commitment, however, she could be said to have "consented" in the sense of Article 28(1)(a) TRIPS.

4 Summary: What SEPs Tell Us About TRIPS and Innovation Through Access

Standardization and SEPs constitute just one context in which a new demand for access to proprietary technology arises. They are, however, a very important instance, both in themselves and as an indicator for a broader phenomenon. When TRIPS is put to their litmus test the result is double-edged. On the level of its fundamental provisions TRIPS cannot only accommodate the need for access. With its goal to balance the interests of technology owners and those who urge for a right to use the agreement is even in the position to foster fair access. The level of specific provisions on access requirements, though, has proven short of perfection. A TRIPS revision might react by explicitly addressing at least a standardization-related need for access. Since TRIPS revision is hardly a near-term scenario the existing set of provisions must be made effective. An appropriate reading of Article 28(1) TRIPS can be a first step in this direction.

References

Allison, J.R. & Lemley, M.A. (1998), Empirical Evidence on the Validity of Litigated Patents, AIPLA Qu. J. 1998, 185, Arlington: American Intellectual Property Law Association

American Bar Association Section of Antitrust Law (2004), Handbook on the Antitrust Aspects of Standards Setting, Chicago: ABA Publishing

Barthelmeß, S. & Gauß, N. (2010), Die Lizenzierung standardessentieller Patente im Kontext branchenweit vereinbarter Standards unter dem Aspekt des Artikel 101 AEUV, WuW 2010, 626, Düsseldorf: Handelsblatt Fachmedien GmbH

- Bausch, T. (2007), Nichtigkeitsrechtsprechung in Patentsachen, Munich: C.H. Beck
- Becker, G. (2013), On Reforming the Patent System, available at: http://www.becker-posner-blog.com/2013/07/on-reforming-the-patent-system-becker.html (accessed 22 July 2015)
- Brand, O. (2013), in Busche, J., Stoll, P. & Wiebe, A. (Eds.), TRIPS, Internationales und europäisches Recht des geistigen Eigentums Kommentar, Cologne: Carl Heymanns Verlag
- Chappatte, P. (2009), FRAND Commitments The Case for Antitrust Intervention, 5 Euro. Comp. J. 2009, 319, Oxford: Hart Publishing
- Bakhoum, M. & Conde Gallego, B. (2015), TRIPS and Competition Rules: From Transfer of Technology to Innovation Policy.
- De Bronett, G.-K. (2009), Gemeinschaftsrechtliche Anmerkungen zum "Orange-Book-Standard"-Urteil des BGH, WUW 2009, 899, Düsseldorf: Handelsblatt Fachmedien GmbH
- Declaration on Patent Protection: Regulatory Sovereignty under TRIPS (Version 1.0 of 15 April 2014), published in 45 IIC 2014, 679, available at: http://www.ip.mpg.de/en/news/declaration_on_patent_protection.html (accessed 20 May 2015)
- Drexl, J. (2014), Zugang zu standardessenziellen Patenten als moderne Regulierungsaufgabe: Wie reagiert das EU-Kartellrecht auf Patentkriege zwischen chinesischen Unternehmen (forthcoming)
- Drexl, J. (2011), Intellectual Property in Competition: How to Promote Dynamic Competition as a Goal, in J. Drexl et al. (Eds.), Common Ground for International Competition Law, Cheltenham: Elgar
- Drexl, J. et al. (2006), Comments of the Max Planck Institute for Intellectual Property, Competition and Tax Law on the Directorate-General Competition Discussion Paper of December 2005 on the Application of Article 82 of the Treaty to Exclusionary Practices, IIC 2006, 558, Munich: Max Planck Institute for Intellectual Property and Competition Law
- European Commission (2012), Antitrust: Commission welcomes IPCom's Public FRAND Declaration, press release of 10 December 2012, MEMO/09/549, available at: http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/09/549&format=HTML&aged=1&lan-guage=DE&guiLanguage=en (accessed 22 July 2015)
- European Commission (2012), Antitrust: Commission sends Statement of Objections to Samsung on Potential Misuse of Mobile Phone Standard-Essential Patents, press release of 21 December 2012, IP/12/1448, available at: http://europa.eu/rapid/press-release_IP-12-1448_en.htm (accessed 22 July 2015)
- European Commission (2013), Antitrust: Commission sends Statement of Objections to Motorola Mobility on Potential Misuse of Mobile Phone Standard-Essential Patents, press release of 6 May 2013, IP/13/406, available at: http://europa.eu/rapid/press-release_IP-13-406_en.htm (accessed 22 July 2015)
- Evans, G.E. (1994), Intellectual Property as a Trade Issue The Making of the Agreement on Trade-Related Aspects of Intellectual Property Rights, 18 World Comp. L. Rev. 1994, 137, London: Kluwer Law International
- Finley, K. (2014), World's Most Innovative Patent Troll sues the Government, WIRED of 15 January 2014, available at: http://www.wired.com/business/2014/01/mphj-ftc-patent/(accessed 22 July 2015)
- von Gamm, O.F. (1997), TRIPS und das nationale Wettbewerbs- und Kartellrecht, in E. Niederleithinger (Ed.), Festschrift Lieberknecht, Munich: C.H. Beck
- Gervais, D. (2012), The TRIPS-Agreement: Drafting History and Analysis, London: Sweet & Maxwell
- Grindley, P. (1995), Standards, Strategy and Policy, Oxford: Oxford University Press
- Harhoff, D. et al. (2013), Patent Litigation in Europe, ZEW Centre for European Economic Research Discussion Paper No. 13-072, available at: http://papers.ssrn.com/sol3/papers.cfm? abstract_id=2333617 (accessed 22 July 2015)
- Harhoff, D., von Graevenitz, G. & Wagner, S. (2013), Conflict Resolution, Public Goods and Patent Thickets, CEPR Discussion Paper Series No. 9468, available at: www.cepr.org/pubs/ dps/DP9468.asp (accessed 22 July 2015)

- Heinemann, A. (1995), Das Kartellrecht des geistigen Eigentums im TRIPS-Übereinkommen der Welthandelsorganisation, GRUR Int. 1995, 535, Munich: C.H. Beck
- Hötte, D. (2009), Urteilsanmerkung zu BGH Orange-Book-Standard, MMR 2009, 686, Munich: C.H. Beck
- Katz, A. & Veel, P.-E. (2013), Beyond Refusal to Deal: A Cross-Atlantic View of Copyright, Competition, and Innovation Policies, 79 Antitrust L.J. 2013, 139, Chicago: ABA Publishing
- Körber, T. (2013), Standardessentielle Patente, FRAND-Verpflichtungen und Kartellrecht, Baden-Baden: Nomos
- Merges, R. & Kuhn, J. (2009), An Estoppel Doctrine for Patented Standards, Cal. L. Rev. 2009, 1, Berkeley: UC Berkeley School of Law
- Miller, J.S. (2007), Standard Setting, Patents, and Access Lock-in: RAND Licensing and the Theory of the Firm, 40 Ind. L. Rev. 2007, 351, Bloomington: Indiana University Maurer School of Law
- Mueller, F. (2013), Patent Firm IPCom settles with T-Mobile, will be more active in U.S. with ex-Hitachi Patents, FOSS Patents Blog Entry of 18 June 2013, available at: http://www.fosspatents.com/2013/06/patent-firm-ipcom-settles-with-t-mobile.html (accessed 22 July 2015)
- Picht, P. (2014), Strategisches Verhalten bei der Nutzung von Patenten in Standardisierungsverfahren aus der Sicht des europäischen Kartellrechts, Berlin/Heidelberg: Springer Verlag
- Picht, P. (2013), Von eDate zu Wintersteiger Die Ausformung des Art. 5 Nr. 3 EuGVVO für Internetdelikte durch die Rechtsprechung des EuGH, GRUR Int. 2013, 22, Munich: C.H. Beck
- Posner, R. (2013), Patent Trolls, available at: http://www.becker-posner-blog.com/2013/07/pat ent-trollsposner.html (accessed 22 July 2015)
- Robertson, A. (2014), The Ultimate Patent Troll is going to Trial against Google and Motorola, The Verge of 4 February 2015, available at: http://www.theverge.com/2014/2/4/5375304/intellectual-ventures-goes-to-trial-against-google-and-motorola (accessed 22 July 2015)
- Stoll, T.P. (2014), Are You Still in? The Impact of Licensing Requirements on the Composition of Standard Setting Organizations, Essays on the Economics of Patents, Standards, and Innovation, available at: http://ssrn.com/abstract=2535735 (accessed 22 July 2015)
- Ullrich, H. (2010), Patente und technische Normen: Konflikt und Komplementarität in patent- und wettbewerbsrechtlicher Sicht, in M. Leistner (Ed.), Europäische Perspektiven des Geistigen Eigentums, Tübingen: Mohr Siebeck
- Ullrich, H. (2010), Comment on the German Federal Supreme Court Decision Orange Book Standard, IIC 2010, 337, Munich: Max Planck Institute for Intellectual Property and Competition Law
- Ullrich, H. (2004), Expansionist Intellectual Property Protection and Reductionist Competition Rules: A TRIPs-Perspective, J. Int'l Econ. L. 2004, 401, Oxford: Oxford University Press
- U. S. Department of Justice & Federal Trade Commission (2007), Antitrust Enforcement and Intellectual Property Rights: Promoting Innovation and Competition, available at: http:// www.ftc.gov/reports/innovation/P040101PromotingInnovationandCompetitionrpt0704.pdf (accessed 22 July 2015)
- Verhauwen, A. (2013), "Goldener Orange-Book-Standard" am Ende? Besprechung zu LG Düsseldorf, Beschl. v. 21. 3. 2013 4 b O 104/12, GRUR 2013, 558, Munich: C.H. Beck

TRIPS and Competition Rules: From Transfer of Technology to Innovation Policy

Mor Bakhoum and Beatriz Conde Gallego

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Abstract The competition-related provisions in the TRIPS Agreement were very much influenced by the context in which the Agreement was concluded. The inclusion of competition provisions served a specific purpose. Competition law was basically seen as a tool to facilitate the transfer of technology. Twenty years after the entry into force of TRIPS, the legal landscape within which IPRs are exercised has experienced tremendous changes on the IP front, as well as on the competition law front. IP protection tends to be raised beyond the minimum standards of TRIPS, questionable protection has been granted specially in the field of patents, enforcement mechanisms and remedies have been strengthened

M. Bakhoum (⋈) • B. Conde Gallego Max Planck Institute for Innovation and Competition, Munich, Germany e-mail: mor.bakhoum@ip.mpg.de; beatriz.conde@ip.mpg.de

Dr. Mor Bakhoum, LL.M. (Lausanne), LL.M. (Chicago-Kent) and Dr. Beatriz Conde Gallego, LL.M. (Würzburg) are Senior Research Fellows at the Max Planck Institute for Innovation and Competition, Munich.

and IP portfolios are strategically used in the markets. From an international perspective, higher IP standards have been exported through bilateral and regional trade agreements. Competition law is developing at a very fast speed, especially in emerging and developing economies. Moreover, competition law and IP laws are increasingly understood as being complementary to each other. A strict and "conflict oriented" reading of TRIPS' competition provisions does not help to cope with the new strategies of innovation and the new forms of use of IPRs. We argue in this paper that a flexible reading of the competition-related provisions in TRIPS provides enough room for applying competition law as an innovation instrument. Hence, the application of competition law to combat IP-related restraints of competition that inhibit innovation would be covered by the rationale of the TRIPS Agreement just as much as an application of competition law aimed at enhancing access to and dissemination of IP-protected products.

1 Introduction

While the TRIPS Agreement aims at harmonizing standards of protection for intellectual property rights (IPRs) worldwide, it is also the first international instrument that generally recognizes the need to control anticompetitive IP-related practices. Articles 8, 31(k) and 40 TRIPS set limits to the operation of IPRs based on competition considerations. Yet, underlying the TRIPS competitionlaw provisions is an understanding of IPRs as a danger to competition. The inclusion of competition rules in the TRIPS Agreement was a concession to the developing countries, which feared the monopolistic potential of a strong exercise of IPRs. They insisted on having this risk mitigated by applying competition law. As a consequence, competition law is largely conceived as a restrictive instrument which interferes with and limits the exclusivity of IPRs. Additionally, negotiations on the TRIPS competition rules were very much influenced by past efforts directed at the adoption of an international instrument on technology transfer. The protection of the local—and in the case of developing countries often weaker—licensee against abuses of the IP right holder was regarded as a key objective of competition law. Not surprisingly, the most detailed treatment of competition aspects in TRIPS is devoted to the regulation of anticompetitive practices in licensing agreements.

Twenty years after the entry into force of the TRIPS Agreement, the role of competition law vis-à-vis IPRs has considerably expanded. Far beyond being a mere instrument for the facilitation of technology transfer, competition law is applied as an innovation policy tool.

IPRs are central regulatory instruments for innovation and cultural markets. As such, they always operate in a given market and in a certain competitive environment. As a market regulatory tool, competition law determines the framework within which competition takes place in a market, thus also in IP-related markets. To function properly, the IP system needs open and competitive markets. By precluding imitation of the protected subject matter, IPRs redirect competition

towards the development of substitutive products, a kind of competition which is considered to produce greater social gains than pure price competition. Whether new technologies and products are developed in the first place, whether they may enter the market and whether they may finally reach consumers will, however, very much depend on the competitive conditions present in the market.

The role of competition law vis-à-vis the IP system is twofold. First, it is for competition law to ensure that innovative products can come into the market. Competition law performs this task by addressing conduct blocking or hindering market access of already developed new or improved products. Ideally, however, competition law enforcers should be equally concerned with conduct aimed at suppressing innovation at a much earlier stage, namely before concrete new products or technologies are fully developed and ripe for market entrance. Second, it is for competition law to ensure that IP-embodied products are disseminated according to market rules. In both dimensions, competition law complements the IP system as an innovation policy tool.

The changing role of competition law gives rise to several questions with regard to the TRIPS Agreement. On a fundamental level: Is the TRIPS Agreement, and more specifically its competition rules, in line with an understanding of IPRs and competition law as being complementary? Are they flexible enough to integrate the two roles competition law should play vis-à-vis the IP system? May they influence the way in which other provisions are interpreted and applied? May the TRIPS Agreement be read as an overarching instrument in favor of innovation? Intrinsically related but on a more concrete level: Does the TRIPS Agreement offer guidance to cope with new kinds of IP-related market practices? What kind of flexibility and guidance does it offer to countries whose competition laws are still at a nascent stage? This contribution addresses these questions.

2 Mapping the Framework: Main Developments in IP and Competition Law Since the TRIPS' Adoption

The following paragraphs sketch briefly the most relevant developments which have taken place in the areas of IP and competition law since the adoption of the TRIPS Agreement.¹

¹ For a more detailed analysis of specific issues see e.g. W. Cornish & K. Liddell (2015), The Origins and Structure of the TRIPS Agreement, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 3 (this volume); H. Ullrich (2015), The Political Foundations of TRIPS Revisited, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 85 (this volume).

2.1 Developments in IP

In the last two decades, IPRs have undergone developments which have impacted the way competition law applies to them. IPRs have remarkably expanded, in both qualitative and quantitative terms. New types of technologies, works and trademarks have been found to be eligible for protection²; right holders have been granted new exclusive prerogatives³; the term of protection for different subject matters has been extended⁴; and enforcement mechanisms and remedies have been considerably strengthened and have taken on an increasingly punitive character.⁵ Moreover, there is broad consensus that, at least in the field of patents, too many rights of often dubious quality have been granted. The generous practice of patent offices together with other systemic weaknesses of patent procedures has surely been a significant factor which has contributed to this problem. Yet, at the root of the increasing propensity of firms to patent, and more generally underlying the expansionist trend, is also a changed perception of the role of IPRs in competition.

IPRs are a core element of an economic system in which productive assets and processes, as well as commercial transactions and products, are largely intangible rather than physical in nature. The shift towards what some scholars have called "intellectual capitalism" has had at least the following two consequences. First, as firms have become aware of the growing value of their intangible assets, they have developed new commercial strategies to fully exploit them. Both the tendency to accumulate large IPR portfolios in order to use them as bargaining chips in licensing negotiations and the tendency observed in some industries to move away from production and distribution and to concentrate on research while deriving income from licensing royalties may be referred to as examples in this context. Though aggressive commercial IP strategies are not necessarily at odds

² See e.g. Directive 96/9/EC of the European Parliament and of the Council of 11 March 1996 on the legal protection of databases, OJ L 77 of 27 March 1996, pp. 20-28.

³ In the copyright field, for example, new forms of digital infringement related to the protection of technological protection measures have been created; see e.g. Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonization of certain aspects of copyright and related rights in the information society, OJ L 167 of 22 June 2001, pp. 10-19.

⁴ See e.g. Directive of the European Parliament and of the Council of 27 September 2011 amending Directive 2006/116/EC on the term of protection of copyright and certain related rights, OJ L 265 of 11 October 2011, pp. 1-5; Sonny Bono Copyright Term Extension Act, Pub. L. No. 105-298, 112 Stat. 2827 (1998).

⁵ See e.g. Directive 2004/48/EC of the European Parliament and of the Council of 29 April 2004 on the enforcement of intellectual property rights, OJ L 195 of 2 June 2004, pp. 16-25.

⁶ See O. Granstrand (2010), Industrial Innovation Economics and Intellectual Property, pp. 18 et seq.

⁷ See S.D. Anderman (2011), The IP and Competition Interface: New Developments, in S.D. Anderman & A. Ezrachi (Eds.), Intellectual Property and Competition Law – New Frontiers, pp. 6 et seq.

⁸ On this issue see D. Harhoff et al. (2007), The Strategic Use of Patents and its Implications for Enterprise and Competition Policies, Tender for No. ENTR/05/82, Final Report.

with legitimate competition, the fact is that IPRs are increasingly used as a strategic tool to influence precisely the kind of (dynamic) competition they are expected to promote. In this context, exclusion based on IPRs may be the more problematic as innovation processes are increasingly cumulative and collaborative in nature. Second, as a response to the increasing value of IPRs, groups representing the interest of IP owners have an incentive to organize and to push for expansive IP protection vis-à-vis their national legislators. Far from being restricted to the national level, this development towards ever higher standards of protection has been paralleled at the international level as well.

As already mentioned, the TRIPS Agreement establishes certain minimum standards of IP protection. However, its Article 1(1) explicitly allows WTO Members to grant more extensive protection, provided that this additional protection does not contravene the provisions of the Agreement. International trade agreements which include IP and set standards that go beyond those of the TRIPS Agreement (so-called TRIPS-plus provisions) have been a reality since the early years of TRIPS but have proliferated extraordinarily in the last 10 or so years. Despite differences in membership, geographical scope and issues covered, these kinds of bilateral and regional trade agreements share a common approach. Accordingly, national concepts and standards of protection recognized in developed countries are made part of the negotiating package that contracting parties—in many cases emerging and developing countries—have to accept and are in this manner exported to the rest of the world. 12

Parallel to this trend towards raising levels of protection and strengthening enforcement mechanisms, and indeed as a reaction to it, the post-TRIPS period has also been characterized by an increased focus on the so-called "TRIPS

⁹ See Sect. 3.1.

¹⁰ Stressing the significance of public choice theory for explaining expansion in IP law, J. Drexl (2009), Immaterialgüterrechte zwischen Innovationsförderung durch Monopole und Wettbewerbsbeschränkung, in Forschungsinstitut für Wirtschaftsverfassung und Wettbewerb, e.V. (Ed.), Innovation und Wettbewerb, Referate des XLII. FIW-Symposions, p. 34; C. Bohannan & H. Hovenkamp (2012), Creation Without Restraint – Promoting Liberty and Rivalry in Innovation, pp. 133 et seq. (focusing mainly on how US copyright law has been captured by interest groups).

¹¹For an overview and analysis of the most significant free trade agreements (FTAs) see P. Roffe (2014), Intellectual Property Chapters in Free Trade Agreements: Their Significance and Systemic Implications, in J. Drexl, H. Grosse Ruse-Khan & S. Nadde-Phlix (Eds.), EU Bilateral Trade Agreements and Intellectual Property: For Better or Worse?, pp. 17 et seq.

¹² On this development and its consequences see different contributions in this volume: J. Drexl (2015), The Concept of Trade-Relatedness of Intellectual Property Rights in Times of Post-TRIPS Bilateralism, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 53 (this volume); H. Ullrich (2015), The Political Foundations of TRIPS Revisited, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 85 (this volume); H. Grosse Ruse-Khan (2015), IP and Trade in a Post-TRIPS Environment, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 163 (this volume).

flexibilities". The TRIPS Agreement not only contains minimum standards of IP protection WTO Members have to comply with, but it also includes norms that leave significant policy space for domestic implementation. Although these TRIPS flexibilities can in principle operate to justify TRIPS-plus measures, the political and academic debate of the last years has centered on how developing countries could and should exploit the room for manœuvre left by TRIPS to accommodate their particular national interests. Hereby, concern has grown about the distributive and developmental implications of TRIPS obligations. More generally, the overall impact of IP protection on broader social, moral and human rights issues—most significantly public health, nutrition, education, biodiversity or environmental protection—has been intensively discussed. This development, in turn, has made IP a central topic for many other international as well as nongovernmental organizations.

As far as the topic of this chapter is concerned, competition law is, first, commonly seen as an area where the concept of TRIPS flexibilities fully applies. ¹⁷ By implementing measures designed to prevent abusive and anticompetitive IP-related practices, WTO Member States may pay attention to legitimate national interests. ¹⁸ Second, beyond its economic rationale competition law may be conceived as an instrument that serves distributive justice. ¹⁹ As such it has a role to play not only in establishing competitive market conditions, but it may also be used as a tool to promote these other social interests referred to above. ²⁰

¹³ On the concept of flexibilities see WIPO (2010), Patent Related Flexibilities in the Multilateral Legal Framework and Their Legislative Implementation at the National and Regional Levels, WIPO-Doc CDIP/5/4 Rev., para. 34.

¹⁴The Doha Declaration can be regarded as the main achievement in this context. See Doha Declaration on the TRIPs Agreement and Public Health, WTO-Doc WT/MIN(01)/DEC/2, adopted on 14 November 2001. Among the many articles on the issue of TRIPS flexibilities see H. Grosse Ruse-Khan (2011), Assessing the Need for a General Public Interest Exception in the TRIPs Agreement, in A. Kur & M. Levin (Eds.), Intellectual Property Rights in a Fair World Trade System – Proposals for a Reform of TRIPs, pp. 167-207.

¹⁵ Among the extensive literature see as one of the early works the Report of the CIPR (2002), Integrating Intellectual Property Rights and Development Policy.

¹⁶For a deeper analysis of this development see G.B. Dinwoodie & R.C. Dreyfuss (2012), A Neofederalist Vision of TRIPs – The Resilience of the International Intellectual Property Regime, pp. 152 et seq.

¹⁷ See WIPO (2010), Patent Related Flexibilities in the Multilateral Legal Framework and Their Legislative Implementation at the National and Regional Levels, CDIP/5/4 Rev., para. 39.

 $^{^{18}}$ For a discussion of the relationship between competition law and policy and other public policies see Sect. 4.1.

¹⁹ To be sure, this is a controversial statement. Competition law's goals are nowadays very much conceived in economic terms. Promoting economic efficiency is seen by many as the main (or even only) goal of competition law. On the different – economic and non-economic – goals ascribed to competition law see among others the contributions in D. Zimmer (2012), The Goals of Competition Law.

²⁰ See J. Drexl (2005), The Critical Role of Competition Law in Preserving Public Goods in Conflict with Intellectual Property Rights, in K.E. Maskus & J.H. Reichman (Eds.), International

2.2 Developments in Competition Law

If one looks at the developments which have taken place in the field of competition law, an expansionist trend may be observed as well. More than one hundred countries have competition laws today. Others are contemplating their adoption. While there are certainly substantial differences between this expansion of competition laws and that experienced by the IP laws, some commonalities may be observed between both processes. Emerging and developing countries have not always had full discretion when deciding whether to enact competition rules or not. In some cases, the adoption of national competition laws has been required by trade agreements or constituted a condition to get financial support from international organizations. ²¹ The perceived benefits of competition law in regulating the market have also prompted some countries to enact competition laws. Also, competition laws in developing jurisdictions have often been built following the principles of developed countries' models. The question of whether one size fits all or whether (and how) to design and apply competition rules in a manner that takes account of the needs and interests of particular jurisdictions is thus one that arises in IP and competition law alike.²²

In contrast to IP law, however, competition law has not been harmonized at an international level. Yet, the efforts to adopt international competition law standards have dominated much of the post-TRIPS debate in the field of competition law. Indeed, with the adoption of the TRIPS Agreement the idea of creating an international competition law regime received a new impulse. On the one hand, the TRIPS Agreement showed that a far-reaching harmonizing exercise could be feasible. On the other hand, with the creation of the WTO the institutional setting seemed also to be existent. Here is not the place to elaborate on the development towards international competition rules at the WTO and the reasons why this project did not succeed. By now, it is largely assumed that, at least in the medium term, international competition law issues will be addressed by means of soft

Public Goods and Transfer of Technology under a Globalized Intellectual Property Regime, pp. 719, 724.

²¹ See E.M. Fox & M.S. Gal (2014), Drafting Competition Law for Developing Jurisdictions: Learning from Experience, Law and Economic Research Paper Series, Working Paper No. 14–11, p. 5.

²² Ibid., p. 2.

²³ For a general overview of this development see M.M. Dabbah (2010), International and Comparative Competition Law, pp. 541 et seq. The relationship between IPRs and competition law was also one of the issues that the WTO Working Group on Trade and Competition discussed; see WTO (1998), Report of the Working Group on the Interaction between Trade and Competition Policy to the General Council, WTO-Doc. WT/WGTCP/2, pp. 37-40. For a comment on the report see A. Heinemann (1999), Problems of Intellectual Property Rights and Competition Policy – The Approach of the Working Group on Trade and Competition, in R. Zäch (Ed.), Towards WTO Competition Rules – Key Issues and Comments on the WTO Report (1998) on Trade and Competition, pp. 312 et seq.

convergence of national laws as well as international cooperation.²⁴ Against this background, the TRIPS competition provisions, albeit rather vague and of a non-mandatory nature,²⁵ provide the only international framework for the assessment of IP-related anticompetitive practices.

Another development which should be highlighted is the increasing significance that the concept of dynamic competition has gained in the competition laws of, at least, most developed jurisdictions. Competition in innovation is not a new phenomenon. The idea that it is not price competition, but competition in innovation, i.e. competition in new products, new technologies, new sources of supply or new types of organization, that leads to greater economic growth can be traced back to Joseph Schumpeter's works in the 1940s. ²⁶ Yet, in part for administrability reasons, competition laws have largely relied on neoclassical models, which mainly take into account the short-term effects of anticompetitive behavior on price and output. It is relatively new that competition law enforcers recognize innovation as a proper parameter of competition beyond the conventional focus on price and output. ²⁷ Thus, it was for instance only in the mid-1990s that the concept of innovation markets was introduced and discussed as an analytical tool to assess the effects of a merger on innovation. ²⁸ Legal texts today avoid the "innovation markets" concept and prefer the terms "innovation competition" or "competition in innovation", ³⁰

²⁴ On the role that the International Competition Network plays in this context see H. Hollman & W. Kovacic (2011), The International Competition Network: Its Past, Current and Future Role, 20 Minn. J. Int'l L. 2011, 274-323.

²⁵ See Sect. 4.1.

²⁶ J.A. Schumpeter (1942), Capitalism, Socialism and Democracy, Chapter VII. However, while Schumpeter accepted, and even advocated, restrictive practices as a way to promote innovation and growth, it was J. M. Clark who provided a theoretical framework for research into more dynamic and more realistic theories and definitions of competition; see e.g. J.M. Clark (1955), Competition: Static Models and Dynamic Aspects, 45 Am. Econ. Rev. 1955, 450-462; J.M. Clark (1961), Competition As A Dynamic Process.

²⁷ J. Drexl (2012), Anticompetitive Stumbling Stones on the Way to a Cleaner World: Protecting Competition in Innovation Without a Market, 8 J. Competition L. & Econ. 2012, 507, 513.

²⁸ R.J. Gilbert & S.C. Sunshine (1995), Incorporating Dynamic Efficiency Concerns in Merger Analysis: The Use of Innovation Markets, 63 Antitrust L.J. 1995, 569-601. The concept of innovation markets found its way into the US IP Guidelines of 1995. See Antitrust Guidelines for the Licensing of Intellectual Property issued by the U.S. Department of Justice and the Federal Trade Commission of 6 April 1995, p. 10. In Europe, the Guidelines that accompanied Commission Regulation (EC) No 772/2004 of 27 April 2004 on the application of Article 81(3) of the Treaty to categories of technology transfer agreements also included it; see Guidelines on the application of Article 81(3) of the Treaty to categories of technology transfer agreements, OJ C 101 of 27 April 2004, pp. 2-42, para. 25.

²⁹ See U.S. Department of Justice & Federal Trade Commission (2010), Horizontal Merger Guidelines, p. 23.

³⁰ See for example Commission Regulation (EU) No 1217/2010 of 14 December 2010 on the application of Article 101(3) of the Treaty on the Functioning of the European Union to certain categories of research and development agreements, OJ L 335 of 18 December 2010, pp. 36-42, para. 20; Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the

mainly because of the intrinsic difficulty of defining and appraising a market in situations where no product is sold but only innovation is at stake.³¹ Leaving terminological aspects aside, protecting dynamic competition or competition in innovation is becoming a central goal of competition law.³² While the full theoretical, methodological and practical implications of this change in focus still have to be explored, it is certain that it has had an impact on the way competition law and IP law relate to each other.

3 Redefining the Role of Competition Law Vis-à-Vis IPRs: Competition Law as an Innovation Policy Instrument

Even if not totally settled, there seems to be a consensus from an academic point of view and in practice in the debate on the relationship between IPRs and competition law. Modern thinking on the IP/competition law interface largely conceives IPRs and competition law as being complementary.³³

Both fields share the common purpose of promoting innovation³⁴ and consumer welfare. IPRs provide incentives for innovation by answering the free-riding problem that characterizes public goods. The exclusive right vested in the inventor gives him the possibility to obtain remuneration for his work and thereby encourages him and potential competitors to invest in innovation. At the same time, by

European Union to horizontal co-operation agreements, OJ C 11 of 14 January 2011, pp. 1-72, paras. 119 et seq.; Guidelines on the application of Article 101 of the Treaty on the Functioning of the European Union to technology transfer agreements, OJ C 89 of 28 March 2014, pp. 3-50, para. 26.

³¹ See J. Drexl (2012), Anticompetitive Stumbling Stones on the Way to a Cleaner World: Protecting Competition in Innovation Without a Market, 8 J. Competition L. & Econ. 2012, 522 et seq.

³² See however T. Wu (2012), Taking Innovation Seriously: Antitrust Enforcement if Innovation Mattered Most, 78 Antitrust L.J. 2012, 303, 314 arguing that while academic scholarship would corroborate this proposition, the U.S. Supreme Court's jurisprudence of the last two decades has made it more difficult to use antitrust law to promote innovation.

³³ See, instead of the extensive literature, e.g. Antitrust Guidelines for the Licensing of Intellectual Property issued by the U.S. Department of Justice and the Federal Trade Commission of 6 April 1995, p. 2; Guidelines on the application of Article 101 of the Treaty on the Functioning of the European Union to technology transfer agreements, OCJ 89 of 28 March 2014, pp. 3-50, para. 7.

³⁴ Much of the literature on the interface between IPRs and competition law has focused on technological rights, and thus on how both fields of law contribute to the promotion of innovation in terms of new and better products. The concept of innovation may, however, be adapted for the purposes of other non-technical IPRs, in particular for copyright. Thus the promotion of cultural diversity at which copyright aims, i.e. the production of cultural goods that meet different consumer needs, would equal the promotion of innovation in patent law. See in this regard Max Planck Institute (2013), Copyright, Competition and Development, Study in Copyright-related Markets on behalf of the World Intellectual Property Organization (WIPO), p. 39. For the sake of simplicity, in the following the term innovation will be used as a generic concept.

excluding others from using and exploiting the invention, IPRs encourage inventors to develop their own innovative products.³⁵

The innovation process, which encompasses the development of marketable products from the invention and their commercialization, ³⁶ heavily relies on a competitive market. It is the market, and the competitive process it creates, that produces information about consumers' preferences and decides ultimately which inventions will be further developed. Competition provides incentives to innovate in the first place. As such, it creates the preconditions for the functioning of the IP system. The protection granted to the right holders as such does not constitute the actual reward. IPRs only give right holders the opportunity to extract a reward from the market³⁷ by commercializing their invention. Hence, the extent to which IPRs are successfully marketed depends on the market, which in the end decides which products (inventions) are successful.

Besides this basic insight, conceiving the relationship between competition law and IPRs in terms of complementarity implies that competition law has a more specific role to play when it comes to the goal of promoting innovation. On the one hand, competition law is supposed to ensure that innovative products are able to come into the market. In other words, competition law guarantees that competition by substitution, on which the IP system relies, works properly. By doing this, competition law may address conduct blocking or hindering market access of new or improved products. Ideally, however, competition law enforcers should be equally concerned with conduct aimed at suppressing innovation at a much earlier stage, namely, before new products or technologies are fully developed and ripe for market entrance.³⁸ On the other hand, with regard to those products or technologies which are already in the market, competition law contributes to their efficient commercialization, i.e. dissemination, by ensuring a competitive market structure. Again, by combating restraints of competition that harm the functioning of markets where IP-protected products are commercialized, competition law serves the goal of bringing innovation to consumers and is thus fully in line with the objectives pursued by the IP system. In both dimensions, by protecting the openness of markets for innovation and by guaranteeing an efficient dissemination of

³⁵ The disclosure regime inherent to patent law which guarantees that in a foreseeable period of time third parties acquire sufficient knowledge of the invention to allow them to work on different technical solutions must also be seen in this context. See on this aspect G. Ghidini (2010), Innovation, Competition and Consumer Welfare in Intellectual Property Law, pp. 53 et seq.

³⁶ Although there is no one single accepted definition of innovation, innovation is often defined as the conversion of knowledge into new commercialized technologies, products and processes, and how these are brought to the market; see WIPO (2011), World Intellectual Property Report – The Changing Face of Innovation, p. 23.

³⁷ See H. Ullrich & A. Heinemann (2007), Die Anwendung der Wettbewerbsregeln auf die Verwertung von Schutzrechten und sonst geschützten Kenntnissen, in U. Immenga & E.-J. Mestmäcker (Eds.), Wettbewerbsrecht, Band I. EG/Teil 2, Kommentar zum Europäischen Kartellrecht, p. 146.

³⁸ For different examples of this kind of conduct see Sect. 3.1.

IP-protected products, competition law functions as an innovation policy instrument.

In performing this task, competition law very often addresses anticompetitive practices which do not directly relate to the exploitation of an IPR.³⁹ Yet, in other cases IPRs or a particular use of them are at the core of conduct aiming at suppressing or hindering innovation. The following paragraphs give some examples of this kind of situations with regard to the two roles identified above.

3.1 Competition Law and IP-Related Innovation Restraints

If one assumes that the promotion of innovation is the core goal of the IP system, to talk about IP-related innovation restraints sounds admittedly like a contradiction. And yet, there may be situations in which IPRs (or again, their particular use) hinder rather than promote innovation.

Certain well-known clauses in licensing agreements, for example, may have a negative impact on the ability of both the licensee and third parties to compete in innovation. Thus, non-compete obligations by which the licensee is obliged not to use third-party technologies may, depending on the licensor's market power and on the number of licensees tied to the licensor's technology, foreclose the market for these technologies. In addition, contractual clauses that prevent the licensee from using and/or developing his own competing technology as well as broad grant-back clauses directly affect the competitiveness of the licensee's technology and his incentives to further invest in its development. Moreover, restrictions imposed on the licensing parties' ability to conduct independent research and development may eliminate an important source of innovation in the market, especially where only few technologies are available.

While innovation restraints in the licensing context should not be underestimated, ⁴⁰ a greater threat for competition in innovation, and at the same time, a bigger challenge for competition law enforcement arises both from the strategic use of IPRs in standardized markets⁴¹ and from patenting strategies that

³⁹ Think, for example, of the conduct of a dominant firm trying to protect its market position from the threat posed by an innovative competitor by paying off distributors for not dealing in the competitor's products.

⁴⁰Both US and EU competition rules contained detailed and complex rules by which the overall positive effects of licensing and the necessity to safeguard the right holder's incentives to license are balanced against the risk that some licensing clauses result in restricting innovation; see Guidelines on the application of Article 101 of the Treaty on the Functioning of the European Union to technology transfer agreements, OJ C 89 of 28 March 2014, pp. 3–50, paras. 128 et seq. Antitrust Guidelines for the Licensing of Intellectual Property issued by the U.S. Department of Justice and the Federal Trade Commission of 6 April 1995, pp. 10 et seq.

⁴¹ A detailed examination of issues regarding technology standards and standard essential patents is made by the contribution of P. Picht (2015), From Transfer of Technology to Innovation

have the potential to negatively influence competitors' research and development activities.

Standards are important innovation catalysts. 42 Standards, either de facto standards or those implemented by a standard-setting organization (SSO), have a strong innovation potential as they reduce significantly the costs at which firms enter the market with standard-based products. By doing so, they increase the rate at which product innovation can happen. 43 At the same time, standardized markets show strong network effects which make it difficult even for highly creative innovations to enter the market. Access to the standard and/or compatibility between standardbased products is thus of crucial importance. When IPRs are held on a standard, the right holder is in a position to decide whether and under which conditions competing undertakings have access to a standard and this right holder enjoys, accordingly, an extremely powerful market position. The decision not to license an IPR or to license it only under certain conditions does not only determine how much competitive pressure the right holder may be exposed to, but may also influence the extent to which innovation within a given standard may take place.⁴⁴ Beyond this aspect and from a more systemic perspective, strategic behavior of IP right holders in the context of standard setting may negatively affect the functioning of the standard-setting process as an innovation mechanism. ⁴⁵ Not only the integrity and accuracy of a process intended to select the best possible technology, but also the overall confidence of market participants in the virtues of this process, may be substantially harmed by opportunistic conduct of IP right holders.⁴⁶

Competition laws have been applied, both in the US and in the EU, to address competition problems related to IP-encumbered standards.⁴⁷ Yet it has been in Europe that the Commission and the European Courts have shown greater

Through Access, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 509 (this volume).

⁴²T. Wu (2012), Taking Innovation Seriously: Antitrust Enforcement if Innovation Mattered Most, 78 Antitrust L.J. 2012, 303, 321.

⁴³ P. Picht (2013), Strategisches Verhalten bei der Nutzung von Patenten in Standardisierungsverfahren aus der Sicht des europäischen Kartellrecht, pp. 179 et seq.; T. Wu (2012), Taking Innovation Seriously: Antitrust Enforcement if Innovation Mattered Most, 78 Antitrust L.J. 2012, 303, 321 et seq.

⁴⁴P. Picht (2013), Strategisches Verhalten bei der Nutzung von Patenten in Standardisierungsverfahren aus der Sicht des europäischen Kartellrecht, pp. 237, 257.

⁴⁵ Stressing this point J. Drexl (2012), Anticompetitive Stumbling Stones on the Way to a Cleaner World: Protecting Competition in Innovation Without a Market, 8 J. Competition L. & Econ. 2012, 507, 534.

⁴⁶On both aspects P. Picht (2013), Strategisches Verhalten bei der Nutzung von Patenten in Standardisierungsverfahren aus der Sicht des europäischen Kartellrecht, pp. 256, 258.

⁴⁷ For a detailed exposition of the relevant US case law see e.g., B. Lundqvist (2014), Standardization under EU Competition Rules and US Antitrust Laws – The Rise and Limits of Self-Regulation, pp. 299 et seq.; C. Tapia, C. (2010), Industrial Property Rights, Technical Standards and Licensing Practices (FRAND) in the Telecommunications Industry, pp. 65 et seq. and 99 et seq.

propensity to apply the abuse-of-dominance prohibition (Article 102 TFEU) to right holders' conduct in standardized markets. Hence, in the IMS Health case the Court of Justice recognized that a refusal to license an indispensable IPR may, under certain circumstances, constitute a violation of Article 102 TFEU. 48 The indispensability of the IPR in this particular case resulted from the fact that the copyright-protected brick structure had become a *de facto* industry standard. Moreover, the Commission has relied on the concept of excessive pricing as a form of abusive conduct prohibited by Article 102 lit. a) TFEU to condemn patent ambush strategies. 49 Concretely, in its *Rambus* decision, it considered that by intentionally refraining from disclosing the existence of patents during the standard-setting process and enforcing them once the standard was set with the aim of extracting high royalty fees. Rambus had abused its dominant position. ⁵⁰ A core argument in the Commission's reasoning was that Rambus' behavior had undermined the confidence that market participants had in standard-setting as a pro-competitive and innovative process.⁵¹ Finally, the Commission has recently found that, although patent holders are generally entitled to seek and enforce injunctions as part of the exercise of their IPRs, under certain circumstances seeking and enforcing injunctions by a patent holder may constitute an abuse of a dominant position.⁵² In particular, the Commission considers that these circumstances are given when, first, the patent is essential to a standard and the patent holder has given a commitment to license its patent on fair, reasonable and non-discriminatory (FRAND) terms during the standard-setting process, and second, the potential licensee is willing to enter into a license on FRAND terms.⁵³ It is remarkable that in justifying its

⁴⁸ ECJ, IMS Health, C-418/01, EU:C:2004:257, paras. 34 et seq.

⁴⁹ Commission Decision of 9 December 2009 relating to a proceeding under Article 102 of the Treaty on the Functioning of the European Union and Article 54 of the EEA Agreement, Case COMP/38.636 – Rambus.

⁵⁰ On potential difficulties of applying Article 102 TFEU in cases where, unlike in the Rambus case, no reproachable conduct could be identified after the acquisition of market dominance see J. Drexl (2012), Anticompetitive Stumbling Stones on the Way to a Cleaner World: Protecting Competition in Innovation Without a Market, 8 J. Competition L. & Econ. 2012, 507, 535 et seq. ⁵¹ Commission Decision of 9 December 2009 relating to a proceeding under Article 102 of the Treaty on the Functioning of the European Union and Article 54 of the EEA Agreement, Case COMP/38.636 – Rambus, para. 29.

⁵² See Commission Decision of 29 April 2014 addressed to Motorola Mobility LLC relating to proceedings under Article 102 of the Treaty of the Functioning of the European Union and Article 54 of the EEA Agreement, Case AT. 39985 – Motorola – Enforcement of GPRS standard essential patents. See also Commission Decision of 29 April 2009 addressed to Samsung Electronics Co., Ltd et al. relating to proceedings under Article 102 of the Treaty of the Functioning of the European Union and Article 54 of the EEA Agreement, Case AT. 39939 – Samsung – Enforcement of UMTS standard essential patents.

⁵³ In contrast to the Commission, German courts require the defendant's offer to enter into a license agreement to be concrete, binding and unconditional in order to justify a competition defense; see German Federal Supreme Court (BGH), Case No. KZR 39/06 – Orange Book Standard (an English version can be found in 41 IIC 2008, 369-375). Because of the evident differences between the two approaches, the Düsseldorf District Court (LG Düsseldorf) has stayed a current case between China's largest telecommunication manufactures Huawei and ZTE and

decision, the Commission very much emphasized the negative impact that an enforcement of a patent under these circumstances would have on innovation.⁵⁴

In contrast to this case law, the competition law treatment of so-called strategic patenting is far less developed. As pointed out above, the creation of large patent portfolios is as such a legitimate commercial strategy which largely reflects the increasing value that companies assigned to their intellectual property. In certain situations, however, the strategic filing of patent applications may have a negative impact on innovation. In this context, the 2009 Pharmaceutical Sector Inquiry Report of the European Commission identified certain patenting strategies that may interfere with the development of competing medicines by reducing the incentives of other originator companies to continue their own R&D efforts. Though identified for the pharmaceutical sector, this kind of patenting practice may likewise occur in other fields of technology. In all such cases, the motivation of the patent applicant is not so much to protect its own invention as predominantly to block innovative efforts of competitors. So far, there is no precedent on the application of the competition rules to blocking patenting strategies.

referred five questions to the European Court of Justice, On 16 July 2015, the ECJ has largely confirmed the Commission's approach. See ECJ, Huawei Technologies, EU:C:2015: 477, paras. 49 et seq.

⁵⁴ See particularly Motorola, para. 312 ("By seeking and enforcing an injunction, a SEP holder may be able to exclude even the most innovative standard-compliant products from the market as, by definition, the patented technology cannot be worked around") and para. 415 ("Motorola's seeking and enforcement of an injunction against Apple . . . may in addition undermine confidence in the standard-setting process and deprive consumers of its benefits.").

⁵⁵ See Sect. 2.1.

⁵⁶ European Commission (2009), Pharmaceutical Sector Inquiry – Final Report, pp. 16, 19. Generally, the Sector Inquiry Report is concerned with two different sets of strategic patenting practices: on the one hand, those which aim at extending the exclusivity period to delay market entry of generics, and on the other hand, those whose objective is to block substitutive innovations by competitors. Regarding the later, blocking patents can be applied either to broaden the applicant's own field of activity (defensive blocking patents) or to limit the scope of action of competitors (aggressive blocking patents); see H. Ullrich (2013), Strategic Patenting by the Pharmaceutical Industry: Towards a Concept of Abusive Practices of Protection, in J. Drexl & N. Lee (Eds.), Pharmaceutical Innovation, Competition and Patent Law – A Trilateral Perspective, pp. 244, 248.

⁵⁷ For an analysis of motivations for patenting across different technology areas see D. Harhoff et al. (2007), The Strategic Use of Patents and its Implications for Enterprise and Competition Policies, Tender for No. ENTR/05/82, Final Report, pp. 231 et seq.

⁵⁸ See H. Ullrich (2013), Strategic Patenting by the Pharmaceutical Industry: Towards a Concept of Abusive Practices of Protection, in J. Drexl & N. Lee (Eds.), Pharmaceutical Innovation, Competition and Patent Law – A Trilateral Perspective, p. 248.

⁵⁹ In contrast, the Commission and the two European courts have confirmed the application of Article 102 TFEU to a strategic use of patent procedures aimed at delaying generic entry in the AstraZeneca case; see Commission Decision of 15 June 2005 relating to a proceeding under Article 82 of the EC Treaty and Article 54 of the EEA Agreement, Case COMP/A.37.507/F3 – Astra Zeneca; EU General Court, Astra Zeneca/Commission, T-321/05, EU:T:2010:266; ECJ, AstraZeneca/Commission, C-457/10 P, EU:C:2012:770. On the relevance of the Astra Zeneca rulings for the assessment of blocking patents see J. Drexl (2013), Astra Zeneca and the EU Sector

started an investigation against Boehringer Ingelheim after a competing pharmaceutical company had raised concerns that Boehringer's patent applications would have the potential of blocking its competing medicines. On suggestion of the Commission, however, the case was settled between the companies involved.⁶⁰

The lack of precedent and, indeed, the preference of the Commission to have the Boehringer case settled evidence the uncertainties that surround the application of the competition rules to this kind of patenting strategy. Thus, in the first place, the necessity and appropriateness of competition law intervention in this field are in themselves not undisputed. 61 If, as we argue in this contribution, competition law has a role to play in safeguarding dynamic competition, situations in which the conduct of a patent applicant may negatively impact competitors' innovation incentives are certainly a case for competition law. 62 Yet, the line between a legitimate and an anticompetitive patent filing is not easy to draw. As has been pointed out, every filing of a patent pursues a "strategic" objective. ⁶³ To determine when a patent has been applied for to protect the applicant's own R&D or, on the contrary, it is part of a strategy which deliberately aims at distorting competitors' R&D efforts is extremely difficult. Moreover, even if this could be done, assessing the impact that such conduct has on innovation may still be a highly speculative exercise. The more nascent an innovation is, the more difficult it will be for a competition agency (or a competitor) to show that a competitor's product or technology would have succeed in the market but for the disputed conduct. While this is a hurdle in all cases in which competition law is concerned with innovation restraints, 64 those which require

Inquiry: When do Filings Violate Competition Law?, in J. Drexl & N. Lee (Eds.), Pharmaceutical Innovation, Competition and Patent Law – A Trilateral Perspective, pp. 312 et seq.

⁶⁰ See European Commission (2011), Antitrust: Commission Welcomes Improved Market Entry for Lung Disease Treatments, press release of 6 July 2011, IP/11/842.

⁶¹ In this context, D. Harhoff et al. (2007), The Strategic Use of Patents and its Implications for Enterprise and Competition Policies, Tender for No. ENTR/05/82, Final Report, pp. 85, 109, provide for a definition of anticompetitive effects of strategic use of the patent system that pivots on the effects on rivals' production efforts. Accordingly, they argue for a division of work between patent law and competition law in the sense that patent law should be concerned with the effects of firms' patenting strategy on others' innovation incentives while competition law should primarily address the effects of these strategies on product markets. Tough this would not leave antitrust authorities without a role in regulating firms' behavior ex post, the main effect is to preclude antitrust agencies from focusing on the provision of innovation incentives (emphasis added).

⁶² In this context, different authors stress the limited ability of patent offices to examine the strategic use of a patent as an exclusionary tool to justify the adequacy of a control based on the application of competition law, see J. Drexl (2013), Astra Zeneca and the EU Sector Inquiry: When do Filings Violate Competition Law?, in J. Drexl & N. Lee (Eds.), Pharmaceutical Innovation, Competition and Patent Law – A Trilateral Perspective, p. 321; T. Wu (2012), Taking Innovation Seriously: Antitrust Enforcement if Innovation Mattered Most, 78 Antitrust L.J. 2012, 303, 325.

⁶³ See H. Ullrich (2013), Strategic Patenting by the Pharmaceutical Industry: Towards a Concept of Abusive Practices of Protection, in J. Drexl & N. Lee (Eds.), Pharmaceutical Innovation, Competition and Patent Law – A Trilateral Perspective, p. 243.

⁶⁴ See C. Bohannan & H. Hovenkamp (2012), Creation Without Restraint – Promoting Liberty and Rivalry in Innovation, pp. 251 et seq.

evidence of how and to what extent a given conduct has affected other firms' incentives to pursue a certain innovation path are surely the most problematic ones. Finally, in those jurisdictions which have modelled their rules on unilateral conduct on the European ones, the legal requirement that the patent applicant enjoy a dominant position constitutes in practice the most significant limitation for controlling patenting practices by means of competition law.⁶⁵

3.2 Promoting Innovation Through Access and Dissemination: The Role of Competition Law

Access and dissemination of IP-embodied products are part of the innovation rationale behind the IP system. This would be incomplete if IP-embodied products did not reach the final consumer. Yet, different forms of anticompetitive practices may harm the efficient functioning of markets where IP-protected products are commercialized and may thereby compromise the access of final consumers to IP-protected products. Hence, in addition to safeguarding the openness of markets for innovation, competition law also plays a role in facilitating access and dissemination of IP-protected products. In contrast to its application to innovation restraints, competition law in these cases follows a more classical approach, focusing mainly on price competition and, to a certain extent, also ensuring that consumers may have access to a great variety of products.

As pointed out, conduct restricting access to IP-protected goods may take different forms. IP-related markets can be, in principle, affected by the same kind of anticompetitive practices as any other market. Hence, IP-related markets are not immune to cartels. Horizontal price-fixing agreements between IP right holders, for example, reduce output and increase the prices of IP-protected products. Because of their pernicious effects on competition, there is consensus on their prohibition by competition law. Beyond these more traditional forms of anticompetitive practices, a particular type of agreement among competitors in the pharmaceutical industry has drawn the attention of competition law enforcers in recent years. Basically, it concerns situations where a brand-name pharmaceutical company, as patent holder, and a generic producer agree to settle either a patent infringement suit or a dispute concerning the validity of the patent under terms that require, firstly, the generic manufacturer not to produce and/or to distribute the patented product until the expiration of the patent, and secondly, the patent holder

⁶⁵For an exhaustive analysis of how the different rules of EU competition law may cope with restrictions of competition in innovation and the main limitations of those rules see J. Drexl (2012), Anticompetitive Stumbling Stones on the Way to a Cleaner World: Protecting Competition in Innovation Without a Market, 8 J. Competition L. & Econ. 2012, 507 et seq.

⁶⁶ A great variety of examples of horizontal agreements in copyright-related markets is provided by Max Planck Institute (2013), Copyright, Competition and Development, Study in Copyright-related Markets on behalf of the World Intellectual Property Organization (WIPO), pp. 83-101.

to "compensate" the generic company for staying out of the market. This practice is commonly known as a "pay for delay" agreement or, since it often involves a payment from the patentee to the alleged infringer, a "reverse payment" settlement agreement. Both in the United States and in Europe, the competition agencies, the Federal Trade Commission and the European Commission, respectively, have perceived such arrangements as an attempt to allocate markets and preserve monopolistic conditions and have condemned them as clear violations of competition law. Unlike in Europe, however, where the Commission's decisions still have to be reviewed by the General Court (and eventually by the Court of Justice), in the United States the Supreme Court has already had the opportunity to pronounce on the legal assessment of this kind of patent settlements.

On 17 June 2013, the Supreme Court gave its judgment in the case *Federal Trade Commission v. Actavis.*⁷⁰ The Supreme Court was asked to give its opinion because of the diverging case law followed by the lower courts. While some courts had endorsed the FTC's view and confirmed the *per se* illegality of reverse payment settlement agreements, or at least, their presumptive illegality, others—the great majority—based on the "scope of the patent" approach⁷¹ held them to be immune

⁶⁷ Announcing the Commission's decision on the Servier case, then Competition Commissioner Joaquín Almunia stated "Servier had a strategy to systematically buy out any competitive threats to make sure that they stayed out of the market. Such behavior is clearly anti-competitive and abusive. Competitors cannot agree to share markets or market rents instead of competing, even when these agreements are in the form of patent settlements. Such practices directly harm patients, national health systems and taxpayers." See European Commission (2014), Antitrust: Commission fines Servier and five generic companies for curbing entry of cheaper versions of cardiovascular medicine, press release of 9 July 2014, IP/14/799.

⁶⁸ In Europe, see European Commission (2013), Antitrust: Commission fines Lundbeck and other pharma companies for delaying market entry of generic medicines, press release of 19 June 2013, IP/13/563; Antitrust: Commission fines Johnson & Johnson and Novartis € 16 million for delaying market entry of generic pain-killer Fentanyl, press release of 10 December 2013, IP/13/1233; Antitrust: Commission fines Servier and five generic companies for curbing entry of cheaper versions of cardiovascular medicine, press release of 9 July 2014, IP/14/799. At the time of writing this contribution, no public version of these decisions was yet available. For an overview of the FTC's practice see A. Cook (2001), Pharmaceutical Patent Litigation Settlements: Balancing Patent & Antitrust Policy Through Institutional Choice, 17 Mich. Telecomm. Tech. L. Rev. 2001, 417, 437 et seq. (commenting particularly on In re Schering-Plough Corp., 136 F.T.C. 956 (2003); FTC v. Watson Pharm., Inc., 611 F. Supp. 2d 1081 (C.D. Cal. 2009) and FTC v. Cephalon, Inc., 551 F. Supp 2d 21 (D.D.C. 2008).

⁶⁹ See EU General Court, Lundbeck v. Commission, Case T-472/13 (pending); EU General Court, Servier and others v. Commission, Case T-691/14 (pending).

⁷⁰ Federal Trade Commission v. Actavis, Inc., et al., 133 U.S. 2223 (2013).

⁷¹ According to this approach, a reverse payment is immune from review under the antitrust rules (1) so long as the anticompetitive effects of a settlement fall under the scope of the exclusionary potential of the patent, (2) the patent infringement claim is not objectively baseless and (3) there had been no fraud in obtaining the patent. See e.g. Federal Trade Commission v. Watson Pharmaceuticals, Inc., 667 F. 3d 1298, 1312 (11th Cir. 2012). Since most patent settlements normally do not extend patent market exclusivity for the patent holder beyond the patent term, there is no reason under this approach to scrutinize them under the antitrust rules.

from antitrust⁷² scrutiny, and *de facto*, *per se* legal.⁷³ The Supreme Court has now clearly rejected the scope-of-the-patent approach.⁷⁴ Because of their potential to produce anticompetitive effects, reverse-payment settlement agreements deserve an antitrust law examination under the rule of reason. On this point, the Supreme Court, while pointing to different factors which may be taken into account, leaves to the lower courts the task to structure the concrete application of the rule of reason.⁷⁵ Yet, beyond its relevance for the specific issue of patent settlements, Actavis can be seen as a land-mark decision on IP and antitrust law, since the Supreme Court has made clear-cut statements as to how it understands the relationship between IPRs and antitrust rules. Thus, when assessing the relevance of the scope of the patent to determine the antitrust legality of an IP-related practice (in this case a patent settlement), the Court clearly states that it would be incongruous to determine it by measuring the anticompetitive effects solely against patent policies, rather than by measuring them against procompetitive antitrust policies as well. Accordingly, it is for both patent law and antitrust law to determine "the scope of the patent monopoly". ⁷⁶ By recognizing that the scope of an IPR as defined by the IP laws has to be also considered together with the impact that a right holder's conduct has on market competition and on consumer welfare, 77 the US Supreme Court openly subscribes to the complementarity theory.⁷⁸

Anticompetitive practices among competitors certainly have a great potential to harm the functioning of IP markets to the detriment of consumers. The same is true of practices which directly relate to the distribution of IP-protected goods, such as price and sales restrictions in licensing agreements. Apart from limited exceptions, ⁷⁹ restrictions on the price a licensee may charge when selling the licensed product to third parties are not tolerated by competition law. Sales restrictions, both territorial and customer-based, meet the same fate if their negative effects on intrabrand price competition are not outweighed by other pro-competitive effects arising

⁷²Though we use the term "competition law" throughout this chapter, for the purpose of commenting on US case law, we retain the US terminology ("antitrust").

⁷³ For an overview of the US case law see G. Gürkaynak, A. Güner & J. Filson (2014), The Global Reach of FTC v. Actavis – Will Europe Differ from the US Approach to Pay-for-Delay Agreements?, 45 IIC 2014, 128–160.

⁷⁴ Federal Trade Commission v. Actavis, Inc., et al., 133 U.S. 2223, 2231 (2013).

⁷⁵ Ibid., 2234-2238 (2013).

⁷⁶ Ibid., 2231 (2013).

⁷⁷ Likewise interpreting the Actavis opinion in this sense D. Lim (2014), Reverse Payments – Life After Actavis, 45 IIC 2014, 1, 4.

⁷⁸ The opinion of the majority of the court is all the more revealing as it clearly diverges from the dissenting opinion of Justice Roberts (joined by Justice Scalia and Justice Thomas); see Federal Trade Commission v. Actavis, Inc., et al., 133 U.S. 2223, 2240 (2013).

⁷⁹ Some jurisdictions allow for resale-price maintenance in the book and newspaper sector mainly for cultural reasons. For a comparison of these rules in different jurisdictions, see Max Planck Institute (2013), Copyright, Competition and Development, Study in Copyright-related Markets on behalf of the World Intellectual Property Organization (WIPO), pp. 58 et seq.

from them. Particularly relevant in this context are both contractual clauses and unilateral practices directed at preventing or hindering parallel trade. Especially in countries which have opted for international exhaustion of IPRs, ⁸⁰ competition law should guarantee that the overall market-opening and competition-enhancing effects of such a decision are not frustrated by individual private practices. ⁸¹

However, due to the specificities of the distribution of copyright-protected works, it is in the copyright-related markets that anticompetitive practices engaged in by distributors are most relevant. This is not the place to comment on the scope and effects of the great variety of practices implemented in this context. The example of dominant distributors that control access to bottleneck technologies and distribution networks or which, as in the film industry, are in a position to decide on the availability of must-have works and refuse to give access to and/or to license these works should be enough to illustrate our point. Hence, in contrast to traditional refusal-to-license cases, enforcing competition law in these cases, i.e. against practices which make it more difficult and more expensive for works to reach consumers, serves at most the dissemination of copyright-protected goods. 83

4 TRIPS and Competition Law: Is There Need for a New Reading?

The previous sections have highlighted how competition law can and should be used to promote innovation. In its role as an innovation tool, competition law guarantees the proper functioning of the IP system and complements it. However, as we have stated in the introductory remarks, the specific context in which the TRIPS Agreement was negotiated casts doubts on whether its competition law provisions may be in line with an understanding of IPRs and competition law as

⁸⁰ As is well known, Article 6 TRIPS Agreement excludes the issue of exhaustion from the WTO dispute settlement. This is commonly seen as an agreement to disagree and interpreted as leaving it to the WTO members' discretion to decide on their own policy regarding exhaustion. As a result, exhaustion regimes differ from country to country as well as among the various types of IPRs.

⁸¹ Generally on the role of competition law and on the limitations national competition laws face in effectively combating parallel trade restrictions, see B. Conde Gallego (2003), The Principle of Exhaustion of Rights and its Implications for Competition Law, 34 IIC 2003, 473-502.

⁸² Again Max Planck Institute (2013), Copyright, Competition and Development, Study in Copyright-related Markets on behalf of the World Intellectual Property Organization (WIPO), p. 39, provides probably the most detailed collection and in-depth analysis of cases dealt with worldwide by competition agencies and courts.

⁸³ As one of its main conclusions, Max Planck Institute (2013), Copyright, Competition and Development, Study in Copyright-related Markets on behalf of the World Intellectual Property Organization (WIPO), p. 275, stresses this "proactive role" of competition law: Competition law provides a means for promoting the interests of both creative authors and consumers in the most effective possible distribution of works by enhancing the access of consumers to works at lower costs and thereby reducing the incentives for piracy.

complementary to each other. Rather, competition law seems to be largely conceived as an interventionist instrument which interferes with and limits the exclusivity of IPRs. ⁸⁴ The question thus arises whether the TRIPS Agreement, and its competition law provisions in particular, are flexible enough to integrate the two roles competition law should play vis-à-vis the IP system.

4.1 The Notion of Abuse of IPRs in the Light of TRIPS Objectives

Article 8(2), Article 31(k)⁸⁵ and Article 40 are normally referred to as the relevant competition-related rules of the TRIPS Agreement.⁸⁶ Under the heading "Principles", Article 8(2) provides that "appropriate measures, provided that they are consistent with the provisions of this Agreement, may be needed to prevent the abuse of intellectual property rights by right holders or the resort to practices which unreasonably restrain trade or adversely affect the international transfer of technology". The general principle stated in Article 8(2) is further developed in Article 40, which specifically deals with anticompetitive practices in contractual licenses. Article 40 is structured in four paragraphs, the first two dealing with aspects of substantive law, the final two providing for procedural rules for cross-border

⁸⁴ See E.M. Fox (1996), Trade, Competition, and Intellectual Property – TRIPs and its Antitrust Counterparts, 29 Vand. J. Transnat'l L. 1996, 481, 486 et seq. (arguing that TRIPS implicitly acknowledges that there may be a clash between TRIPS protection and competition law and that therefore TRIPS calls for a concept on the limits of competition laws). Indeed, it is in this context that the explicit requirement in Article 8(2) and Article 40(2) TRIPS that national competition measures must be consistent with other provisions of the TRIPS Agreement has to be read. For different interpretations of the not self-explanatory consistency requirement see A. Heinemann (1996), Antitrust Law of Intellectual Property in the TRIPS Agreement of the World Trade Organization, in F.-K. Beier & G. Schricker (Eds.), From GATT to TRIPS – The Agreement on Trade-related Aspects of Intellectual Property Rights, p. 242; H. Ullrich (2005), Expansionist Intellectual Property Protection and Reductionist Competition Rules: A TRIPS Perspective, in K.E. Maskus & J.H. Reichman (Eds.), International Public Goods and Transfer of Technology under a Globalized Intellectual Property Regime, pp. 736 et seq.

⁸⁵ In the following, this contribution will focus on the analysis of Article 8(2) and 40 TRIPs. A detailed analysis of Article 31 TRIPs is conducted by P. Picht (2015), From Transfer of Technology to Innovation Through Access, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 509 (this volume).

⁸⁶ See, for example, UNCTAD-ICTSD (2005), Resource Book on TRIPS and Development, p. 541; OECD (1999), Competition Elements in International Trade Agreements: A Post-Uruguay Round Overview of WTO Agreements, Document COM/TD/DAFFE/CLP(98)26/FINAL, pp. 14 et seq. Other authors would also consider Article 67 TRIPS as competition-related as the technical and financial cooperation duties of developed members towards developing and least developed members also extends to the preparation of laws and regulations on the prevention of abuse of intellectual property rights; see M. Ricolfi (2006), Is there an Antitrust Antidote against IP Overprotection within TRIPS?, 10 Marquette Intell. Prop. L. Rev. 2006, 305, 312-313.

violations of competition law. With regard to substantive provisions, Article 40 (1) contains the consensual recognition of WTO Members that "some licensing practices or conditions pertaining to intellectual property rights which restrain competition may have adverse effects on trade and may impede the transfer and dissemination of technology". As a logical implication of this recognition, Article 40(2) provides further that Members are not prevented "from specifying in their legislation licensing practices or conditions that may in particular cases constitute an abuse of intellectual property rights having an adverse effect on competition in the relevant market" and that they may "adopt, consistently with the other provisions of this Agreement, appropriate measures to ... control such practices".

The vagueness of the TRIPS competition-related provisions poses challenging questions as to their scope of application and nature. ⁸⁷ By the same token, these ambiguities allow for a considerable interpretative scope which, in turn, permits a flexible reading of them to accommodate an understanding of competition law as an instrument in favor of innovation. This is particularly true with regard to the central notion of the abuse of IPRs. Before exploring this notion in detail, however, some brief observations should be made as to the general framework in which it is embedded.

Article 8 TRIPS states the general framework within which Members may make exceptions to the implementation and enforcement of the TRIPS minimum standards of protection. Whereas the second paragraph of this provision clearly hints at the possibility to control problematic conduct on the part of the right holder by means of competition law, the first paragraph leaves WTO Members great discretion to adopt measures necessary to protect vital public interests. Though commentators largely look at either one or the other kind of measures separately, the question regarding the relationship between competition law and policy and other public policies nevertheless arises. At its background is the more fundamental question on the goals of competition law. Hence, if the achievement of economic efficiency is seen as the exclusive goal of competition law, there is little or even no room for taking socio-political and developmental considerations into account in competition law cases. Things are different, however, if the goals ascribed to

⁸⁷ For a more exhaustive analysis of the TRIPs competition provisions see among others UNCTAD-ICTSD (2005), Resource Book on TRIPS and Development, p. 541; A. Heinemann (2002), Immaterialgüterschutz in der Wettbewerbsordnung, pp. 580-594; B. Conde Gallego (2010), Intellectual Property Rights and Competition Policy, in C.M. Correa (Ed.), Research Handbook on the Protection of Intellectual Property under WTO Rules – Intellectual Property in the WTO Volume 1, pp. 231-246.

⁸⁸ Article 8(1) stipulates: 'Members may, in formulating or amending their laws and regulations, adopt measures necessary to protect public health and nutrition, and to promote the public interest in sectors of vital importance to their socio-economic and technological development, provided that such measures are consistent with the provisions of this Agreement.'

⁸⁹ This is the approach followed by mainstream antitrust courts and scholars in the USA. In the EU, public policy objectives have been repeatedly considered in the application of the competition rules, particularly of Article 101 TFEU. Yet, with the endorsement of a more economic approach by the Commission doubts have been cast on the appropriateness of taking public policy goals into account. The literature on this topic is abundant. Among others see the exhaustive analysis by

competition law are defined in broader terms. ⁹⁰ A deep analysis of this issue would certainly exceed the scope of this contribution. For the purpose at hand, it suffices to remark that the use of competition law we are advancing here would not only fit within an efficiency-oriented competition law but would equally allow those WTO Members that have worded the goals of their competition laws in a more open manner to take non-economic considerations into account.

Article 8(2) enables WTO Members to address three types of behavior by IP right holders, namely (1) abuses of IPRs, (2) practices which unreasonably restrain trade and (3) practices which adversely affect the international transfer of technology. Of these three, it is the concept of the abuse of IPRs that offers WTO Members room for manœuver. Thus, the notion of abuse is commonly understood as going beyond purely IP-related anticompetitive practices. It presupposes neither the existence of market dominance on the part of the right holder, 91 nor an anticompetitive use of the right. 92 Article 5(A) of the Paris Convention, which is usually brought up in this context, 93 mentions the failure to work an invention within a given period of time that is not justified by legitimate reasons as an example of an abuse of the patent right. Apart from stating a concrete example of what may constitute an abuse, however, this provision gives only limited guidance to define the concept of abuse. Thus, it follows from it that an abuse consists of an illegitimate use of the right. In this context, it has been further argued that an abuse is a use of the right that defeats its purpose, and that it is for the WTO Members to define the concept of abuse through the adoption of appropriate measures. 94 Though there is nothing to object to the first part of this affirmation, such a broad statement

G. Monti (2002), Article 81 EC and Public Policy, 39 CML Rev. 2002, 1057-1099; C. Townley (2009), Article 81 EC and Public Policy.

⁹⁰ See for instance Section 2 of the South African Competition Act: "The purpose of this Act is to promote and maintain competition ... in order – (a) to promote the efficiency, adaptability and development of the economy; (b) to provide consumers with competitive prices and product choices; (c) to promote employment and advance the social and economic welfare of South Africans; (d) to expand opportunities for South African participation in world markets ...; (e) to ensure that small and medium-sized enterprises have an equitable opportunity to participate in the economy; and (f) to promote a greater spread of ownership, in particular to increase the ownership stakes of historically disadvantaged persons." For a study of how competition law can be used to promote public health see J. Berger (2006), Advancing Public Health by Other Means: Using Competition Policy, in P. Roffe, G. Tansey & D. Vivas-Eugui (Eds.), Negotiating Health – Intellectual Property and Access to Medicines, pp. 181-203.

⁹¹ See UNCTAD-ICTSD (2005), Resource Book on TRIPS and Development, p. 548; A. Heinemann (2002), Immaterialgüterschutz in der Wettbewerbsordnung, p. 586.

⁹² See O. Brand (2007), Artikel 8 – Grundsätze, in J. Busche & P.-T. Stoll (Eds.), TRIPs – Internationales und europäisches Recht des geistigen Eigentums, p. 182; C.M. Correa (2007), Trade Related Aspects of Intellectual Property Rights – A Commentary on the TRIPs Agreement, p. 111.

⁹³ Ibid.; A.A. Yusuf (2008), TRIPS: Background, Principles and General Provisions, in C.M. Correa & A.A. Yusuf (Eds.), Intellectual Property and International Trade – The TRIPS Agreement, p. 15.

⁹⁴ UNCTAD-ICTSD (2005), Resource Book on TRIPS and Development, p. 548.

needs to be concretized. Moreover, without denying that WTO Members retain a great degree of flexibility when defining what constitutes an abuse, the TRIPS Agreement does indeed set out the framework within which Members may do this.

In this regard, Article 7 TRIPS conceives the protection of IPRs not as a goal in itself but rather as a means to achieve further ends. According to this provision, intellectual property protection should contribute to the promotion of technological innovation, to the transfer and dissemination of technology and to the mutual advantage of producers and users of technological knowledge, all this in a manner conducive to social and economic welfare and to a balance of rights and obligations. Whereas the goal of promoting innovation underlines the classical rationale for granting IP protection, the reference in this article to the transfer and dissemination of technology and to the interests of users of IP-protected goods clearly points towards access considerations. Coming back to the concept of abuse, a use of the IP right that runs counter to the goals of promoting the diffusion of knowledge and of preserving access to it would definitely defeat its purpose. Likewise, as has been pointed out throughout this contribution, IP protection can only effectively contribute to the goal of promoting innovation if the operability of the mechanism of dynamic competition is guaranteed. Thus, a use of the IP right directed at restricting or excluding the possibility of competing firms to offer substitute goods would also qualify as an abuse of the right.

The notion of the abuse of IPRs also plays a major role in the context of Article 40 TRIPS. Thus, Article 40(2) affirms the Members' sovereign power to establish and define rules to prevent and control "licensing practices and conditions that may in particular cases constitute an abuse of intellectual property rights having an adverse effect on competition in the relevant market". When trying to shed light on the meaning, scope and interrelation of the two paragraphs of Article 40, commentators point out that Article 40(2) is more narrowly worded than Article 40(1). 95 In our view, the opposite is true. Article 40(1) focuses on two specific kinds of anticompetitive licensing practices, namely, those that restrict trade and those that hinder the transfer and dissemination of technology. As to the first category, one may think, for instance, of territorial restrictions and export prohibitions inserted in licensing agreements, of exclusivity clauses that have the effect of blocking foreign market access, of quantitative restrictions resulting in an impediment of parallel trade, or of a segmentation of national markets on the basis of a net of licensing contracts. While it is true that this sort of practices should be at the center of any international instrument which like the TRIPS Agreement is concerned with the trade-relation of IPRs, it is also true that they only involve one kind of possible negative effect. Significantly, any of the practices exemplified in Article 40(2) exclusive grant-back conditions, no-challenge clauses and coercive package licensing-have a clear trade-related element. With regard to the second type of

⁹⁵ O. Brand (2007), Artikel 40 – Vertragliche Lizenzen, in J. Busche & P.-T. Stoll (Eds.), TRIPs – Internationales und europäisches Recht des geistigen Eigentums, p. 586; UNCTAD-ICTSD, Resource Book on TRIPS and Development, p. 558.

anticompetitive licensing practices covered by Article 40(1), the explicit reference to technology excludes from the outset the consideration of anticompetitive practices in licensing agreements that do not have a technological subject matter. As a base for the regulatory power of WTO Members in the field of competition rules relating to licensing agreements, Article 40(1) is definitely too narrow. Not so Article 40(2). If, as we have proposed here, the notion of abuse is to be interpreted and concretized in the light of the objectives set out in Article 7, it becomes clear that Article 40(2) states a broad framework for national rules preventing anticompetitive licensing practices that may not only restrain trade with IP-protected products and impede the transfer of technology, but also and more generally run counter to the goal of promoting innovation and of disseminating knowledge and preserving access to it.

4.2 TRIPS and Concrete IP-Related Practices

It follows from this analysis that the question posed at the beginning of this part can be answered in the affirmative: A use of competition law to combat IP-related restraints of competition that inhibit innovation would be covered by the rationale of the TRIPS Agreement just as much as an application of competition law aimed at enhancing access to and dissemination of IP-protected products. The following remarks explore the implications of this finding for such concrete IP-related anticompetitive practices as those identified in the previous paragraphs. ⁹⁶

As shown above, IP-related restraints of innovation may take different forms. Article 40(2) TRIPS explicitly lists among the licensing practices Member States are able to prevent or control exclusive grant-back and no-challenge clauses as well as coercive package licenses. All three can be regarded as examples of innovation restraints. The scope of Article 40 TRIPS does not, however, end here. The practices listed are not exhaustive. If read as proposed in this chapter, Article 40 (2) allows WTO Members to control by means of competition law licensing practices of standard essential IP right holders. Hence, as already pointed out, the decision not to license a standard essential IP right or to license it only under certain conditions may considerably impact the extent to which innovation within a

⁹⁶ See Sects. 3.1 and 3.2.

⁹⁷ For a case study of how coercive package licensing directed at raising rivals' costs may negatively affect innovation in industries in which design and technological innovation are important competitive features see D.L. Rubinfeld & R. Maness (2005), The Strategic Use of Patents: Implications for Antitrust, in F. Lévêque & H. Shelanski (Eds.), Antitrust, Patents and Copyright – EU and US Perspectives, pp. 85 et seq.

⁹⁸ With regard to standard essential patents see in this sense also P. Picht (2015), From Transfer of Technology to Innovation Through Access, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 509 (this volume).

given standard may take place. Whereas the practice of imposing non-FRAND licensing conditions or of discriminating among different license seekers would certainly be covered by Article 40 TRIPS, it is more doubtful whether a refusal to license a standard essential IP right would. In this context, it has been argued that the wording "practices or conditions" in Article 40 TRIPS has to be understood broadly in the sense of including not only contractual clauses, but all circumstances surrounding the grant and execution of licenses, thus including situations of refusal to license by right holders.⁹⁹ Even if one did not support such a broad reading, ¹⁰⁰ situations in which a right holder refuses to license his standard essential IP right would fall under the broader scope that Article 8(2) TRIPS offers to control IP-related abusive behavior.

Accordingly, Article 8(2) TRIPS has to be seen as the core provision empowering WTO Members to use their competition laws to react against strategic uses of IPRs aimed at restricting competition in innovation. Refusing to license a standard essential IPR, enforcing injunctions to block the development and commercialization of innovative standard-compliant products or filing patent applications directed at distorting competitors' innovative efforts are just some examples of such a strategic use.

In contrast to the competition laws of many jurisdictions, the concept of abuse in Article 8(2) TRIPS does not presuppose the possession of a market-dominant position. Rather, it generally relates to a right holder's conduct that is capable of undermining the IP's core objectives. If, as explained above, the legal requirement of market dominance proves to be one of the most significant practical obstacles to effectively addressing certain innovation restraints, its maintenance, or at least its relaxation in order to apprehend cases like this, should be reconsidered from a competition law perspective. ¹⁰¹ In any case, the TRIPS Agreement, and its Article 8 (2) in particular, would not stand in the way of such a development.

With regard to those anticompetitive practices that harm the efficient functioning of IP-related markets, it has been shown how competition law enforcement, by maintaining competitive distribution markets, enhances the dissemination of and the access of consumers to IP-protected goods. In the majority of cases, competition law will do this without having to interfere with or limit the exclusivity of the IPRs.

⁹⁹ See UNCTAD-ICTSD, Resource Book on TRIPS and Development, p. 556. Supporting this view, C.M. Correa, Trade Related Aspects of Intellectual Property Rights – A Commentary on the TRIPs Agreement, p. 399; P. Roffe & C. Spennemann (2008), Control of Anti-competitive Practices in Contractual Licenses under the TRIPs Agreement, in C.M. Correa & A.A. Yusuf (Eds.), Intellectual Property and International Trade – The TRIPS Agreement, p. 317.

¹⁰⁰ See B. Conde Gallego (2010), Intellectual Property Rights and Competition Policy, in C.M. Correa (Ed.), Research Handbook on the Protection of Intellectual Property under WTO Rules – Intellectual Property in the WTO Volume 1, pp. 240 et seq.

¹⁰¹ Considering this see P. Picht (2013), Strategisches Verhalten bei der Nutzung von Patenten in Standardisierungsverfahren aus der Sicht des europäischen Kartellrecht, p. 579; J. Drexl (2012), Anticompetitive Stumbling Stones on the Way to a Cleaner World: Protecting Competition in Innovation Without a Market, 8 J. Competition L. & Econ. 2012, 542.

By largely focusing on the antagonistic view of IP and competition law, the TRIPS' fathers very much overlooked this aspect. In other cases, however, promoting market competition implies restricting the use a right holder may make of his IPR. Whether such a use qualifies as an abuse of the IPR in the sense of Article 8 (2) TRIPS depends indeed on the specific circumstances of the case. Though complex enough, the pay-for-delay cases are probably the easiest ones, as they do not only involve cartel-like conduct, but their negative impact on consumer welfare is widely established. Condemning excessive prices of IP-protected products or a refusal to license on the grounds that it limits price competition would certainly be far more challenging. Surprisingly, assistance comes from a quite unexpected source. By seeing IPRs (patents) as defined by both IP and competition policies, the US Supreme Court 102 has opened the door for taking the market impact of a right holder's conduct into full account.

5 International Dimension

The TRIPS competition-related provisions call for a number of observations with regard to their significance within the international legal framework. First and foremost, IP and competition law are not on an equal footing in the TRIPS Agreement. Whereas the agreement requires WTO members to guarantee mandatory minimum standards of IP protection, enacting competition rules is only optional. Given the outstanding importance of competition law as an element to balance and safeguard the proper functioning of the IP system, consideration should be given to transforming the voluntary competition-related rules in TRIPS into positive obligations. WTO Members would thus be obliged to introduce and apply competition rules to anticompetitive practices of IP right holders. 103

Moreover, the TRIPS Agreement relies on the national rules of the WTO Members to prevent and combat abuses within the IP system. By doing so, it offers them an open and flexible framework for the formulation of their IP-related competition rules. The decision not to introduce international IP-related competition standards is certainly the right one. Unlike in other fields of competition law in which broad consensus on the pernicious effects of certain anticompetitive practices exists, ¹⁰⁴ the application of competition law to IPRs is highly complex and hotly debated, even in jurisdictions following a similar approach. Under this perspective, a harmonization exercise would not only be hardly feasible. Most

¹⁰² Federal Trade Commission v. Actavis, Inc., et al., 133 U.S. 2223, 2231 (2013).

¹⁰³ See also in this sense the proposal for an amendment of Article 8(2) TRIPs and the introduction of a new Article 8(b) in TRIPs elaborated by the project "Intellectual Property Rights in Transition" (IPT). The text of the proposals is available in A. Kur & M. Levin (2011), Intellectual Property Rights in a Fair World Trade System – Proposals for a Reform of TRIPs, pp. 455-525.

¹⁰⁴ See, for instance, OECD (1998), Recommendation of the Council Concerning Action Against Hard Core Cartels, OECD-Doc. C(98)35/FINAL.

importantly, introducing international substantive standards on IP-related competition law would necessarily result in constricting the leeway of WTO Members.

The decentralized approach followed by TRIPS in the field of competition law has at least two consequences. First, the effectiveness of the use of competition law as a regulatory tool to monitor the exercise of IPRs depends on the strength of each individual WTO Member. The examples from the case law discussed in this paper showcase a proactive application of competition law in the EU and the US as an innovation policy instrument that works by fighting restraints of innovation and guaranteeing access and dissemination to IP-embodied products. Competition law in these jurisdictions is increasingly used as a legal instrument that defines the framework for the exercise of IPRs. The situation may be different in emerging and developing economies. Far from overenforcing their laws, as industrialized countries feared at the time of TRIPS negotiations, many of them exempt IP from competition law application. 105 Exempting IP from competition law application is not in the spirit of the TRIPS Agreement and obviously not in the interest of the countries wishing to protect competition in their markets. Secondly, the motivations behind the application of competition law to IPRs may differ from country to country. As argued in this chapter, an open reading of the TRIPS competition-related provisions allows an application of competition law to fight both restraints of competition that hinder innovation and those that hamper access to and dissemination of IP-protected goods. While some countries may put an emphasis on promoting innovation stricto sensu, others may use competition law as a dissemination and access instrument, focusing mostly on price competition and access to consumers. Whether the emphasis should be put on access and dissemination or on innovation is a policy choice each country has to make depending on its own interests and constraints.

Finally, whereas the relevance of the TRIPS competition-related provision has been stressed throughout this contribution, a caveat has to be made as to their real significance for the completion of an international economic order. With the adoption of the TRIPS Agreement, a principle of global protection of IPRs was added to the principle of global free trade. Global markets of IP-protected goods were thus made possible. In contrast, the TRIPS competition rules do not create an international framework that guarantees the protection of competition on international markets. Competition law control remains national or regional at best. Though this system may certainly have its virtues, to be really effective, national IP-related competition rules should be equally concerned with the protection of competition on international IP markets.

¹⁰⁵ An overview of such exemptions is provided in Max Planck Institute (2013), Copyright, Competition and Development, Study in Copyright-related Markets on behalf of the World Intellectual Property Organization (WIPO), p. 44 et seq.

¹⁰⁶See J. Drexl (2003), International Competition Law – A Missing Link between TRIPS and Transfer of Technology (on file with the authors), p. 4.

¹⁰⁷ See J. Drexl (2008), Intellectual Property and Competition: Sketching a Competition-Oriented Reform of TRIPS, in A. Bakardjieva Engelbrekt et al. (Eds.), Festskrift till Marianne Levin, p. 266.

6 Conclusion

IPRs and competition law are complements in the goal of promoting innovation and consumer welfare. While it is assumed that the IP system promotes innovation, competition law can be equally conceived as an innovation tool. As such, it has a role to play in safeguarding the openness of markets for innovations. At the other extreme of the innovation process, it contributes to their efficient commercialization by ensuring a competitive market structure. In both dimensions, competition law guarantees the proper functioning of the IP system. Against this background, the TRIPS competition-related provisions are of utmost importance. We have argued in this contribution for a flexible reading of them in light of the TRIPS objectives. Such a reading would not only allow an application of competition law that safeguards the integrity of the innovation process. Most significantly, it would transform TRIPS from an instrument devoted to the protection of IP into an overarching instrument in favor of innovation.

References

- Anderman, S.D. (2011), The IP and Competition Interface: New Developments, in S.D. Anderman & A. Ezrachi (Eds.), Intellectual Property and Competition Law New Frontiers, p. 6, Oxford: Oxford University Press
- Berger, J. (2006), Advancing Public Health by Other Means: Using Competition Policy, in P. Roffe, G. Tansey & D. Vivas-Eugui (Eds.), Negotiating Health Intellectual Property and Access to Medicines, pp. 181-203, London: Earthscan
- Bohannan, C. & Hovenkamp, H. (2012), Creation Without Restraint Promoting Liberty and Rivalry in Innovation, Oxford: Oxford University Press
- Brand, O. (2007), Artikel 40 Vertragliche Lizenzen, in J. Busche & P.-T. Stoll (Eds.), TRIPs Internationales und europäisches Recht des geistigen Eigentums, p. 586, Köln: Heymanns
- Brand, O. (2007), Artikel 8 Grundsätze, in J. Busche & P.-T. Stoll (Eds.), TRIPs Internationales und europäisches Recht des geistigen Eigentums, p. 182, Köln: Heymanns
- CIPR (2002), Integrating Intellectual Property Rights and Development Policy, available at: http://www.iprcommission.org/graphic/documents/final_report.htm (accessed 20 May 2015)
- Clark, J.M. (1955), Competition: Static Models and Dynamic Aspects, 45 Am. Econ. Rev. 1955, 450, Pittsburgh: American Economic Association
- Clark, J.M. (1961), Competition As A Dynamic Process, Washington D.C.: Brookings Institution Conde Gallego, B. (2003), The Principle of Exhaustion of Rights and its Implications for Competition Law, 34 IIC 2003, 473, Munich/Berlin: C.H. Beck/Springer
- Conde Gallego, B. (2010), Intellectual Property Rights and Competition Policy, in C.M. Correa (Ed.), Research Handbook on the Protection of Intellectual Property under WTO Rules Intellectual Property in the WTO Vol. 1, pp. 231-246, Cheltenham: Edward Elgar
- Cook, A. (2001), Pharmaceutical Patent Litigation Settlements: Balancing Patent & Antitrust Policy Through Institutional Choice, 17 Mich. Telecomm. Tech. L. Rev. 2001, 417, Ann Arbor, MI: University of Michigan Law School
- Cornish, W. & Liddell, K. (2015), The Origins and Structure of the TRIPS Agreement, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles (p. 3), Heidelberg: Springer (this volume)

- Correa, C.M. (2007), Trade Related Aspects of Intellectual Property Rights A Commentary on the TRIPs Agreement, Oxford: Oxford University Press
- Dabbah, M. (2010), International and Comparative Competition Law, Cambridge University Press
- Dinwoodie, G.B. & Dreyfuss, R.C. (2012), A Neofederalist Vision of TRIPs The Resilience of the International Intellectual Property Regime, Oxford: Oxford University Press
- Drexl, J. (2003), International Competition Law A Missing Link between TRIPS and Transfer of Technology, available at: http://www.wipo.int/edocs/mdocs/academy/en/wipo_wto_2003/wipo_wto_2003-relateddrexl.doc (accessed 22 May 2015)
- Drexl, J. (2005), The Critical Role of Competition Law in Preserving Public Goods in Conflict with Intellectual Property Rights, in K.E. Maskus & J.H. Reichman (Eds.), International Public Goods and Transfer of Technology Under a Globalized Intellectual Property Regime, pp. 719, Cambridge: Cambridge University Press
- Drexl, J. (2008), Intellectual Property and Competition: Sketching a Competition-Oriented Reform of TRIPS, in A. Bakardjieva Engelbrekt et al. (Eds.), Festskrift till Marianne Levin, p. 266, Stockholm: Norstedt Juridik AB
- Drexl, J. (2009), Immaterialgüterrechte zwischen Innovationsförderung durch Monopole und Wettbewerbsbeschränkung, in Forschungsinstitut für Wirtschaftsverfassung und Wettbewerb, e.V. (Ed.), Innovation und Wettbewerb, Referate des XLII. FIW-Symposions, p. 34, Köln: Heymanns
- Drexl, J. (2012), Anticompetitive Stumbling Stones on the Way to a Cleaner World: Protecting Competition in Innovation Without a Market, 8 J. Competition L. & Econ. 2012, 507, Oxford: Oxford University Press
- Drexl, J. (2013), Astra Zeneca and the EU Sector Inquiry: When do Filings Violate Competition Law?, in J. Drexl & N. Lee (Eds.), Pharmaceutical Innovation, Competition and Patent Law A Trilateral Perspective, p. 312, Cheltenham: Edward Elgar
- Drexl, J. (2015), The Concept of Trade-Relatedness of Intellectual Property Rights in Times of Post-TRIPS Bilateralism, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles (p. 53), Heidelberg: Springer (this volume)
- European Commission (2009), Pharmaceutical Sector Inquiry Final Report, pp. 16, 19
- European Commission (2011), Antitrust: Commission Welcomes Improved Market Entry for Lung Disease Treatments, press release of 6 July 2011, IP/11/842
- European Commission (2013), Antitrust: Commission fines Johnson & Johnson and Novartis € 16 million for delaying market entry of generic pain-killer Fentanyl, press release of 10 December 2013, IP/13/1233
- European Commission (2013), Antitrust: Commission fines Lundbeck and other Pharma companies for delaying market entry of generic medicines, press release of 19 June 2013, IP/13/563
- European Commission (2014), Antitrust: Commission fines Servier and five generic companies for curbing entry of cheaper versions of cardiovascular medicine, press release of 9 July 2014, IP/14/799
- Fox, E.M. & Gal, M.S. (2014), Drafting Competition Law for Developing Jurisdictions: Learning from Experience, Law and Economic Research Paper Series, Working Paper No. 14-11, p. 5
- Fox, E.M. (1996), Trade, Competition, and Intellectual Property TRIPs and its Antitrust Counterparts, 29 Vand. J. Transnat'l L. 1996, 481, Tennessee: Vanderbilt University Law School
- Ghidini, G. (2010), Innovation, Competition and Consumer Welfare in Intellectual Property Law, Cheltenham: Edward Elgar
- Gilbert, R.J. & Sunshine, S.C. (1995), Incorporating Dynamic Efficiency Concerns in Merger Analysis: The Use of Innovation Markets, 63 Antitrust L.J. 1995, 569, Chicago: American Bar Association
- Granstrand, O. (2010), Industrial Innovation Economics and Intellectual Property, Göteborg: Svenska Kulturkompaniet

- Grosse Ruse-Khan, H. (2011), Assessing the Need for a General Public Interest Exception in the TRIPs Agreement, in A. Kur & M. Levin (Eds.), Intellectual Property Rights in a Fair World Trade System Proposals for a Reform of TRIPs, pp. 167-207, Cheltenham: Edward Elgar
- Grosse Ruse-Khan, H. (2015), IP and Trade in a Post-TRIPS Environment, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles (p. 163), Heidelberg: Springer (this volume)
- Gürkaynak, G., Güner, A. & Filson, J. (2014), The Global Reach of FTC v. Actavis Will Europe Differ from the US Approach to Pay-for-Delay Agreements?, 45 IIC 2014 128–160, Munich/Berlin: C.H. Beck/Springer
- Harhoff, D. et al. (2007), The Strategic Use of Patents and its Implications for Enterprise and Competition Policies, Tender for No. ENTR/05/82, Final Report
- Heinemann, A. (1996), Antitrust Law of Intellectual Property in the TRIPs Agreement of the World Trade Organization, in F.-K. Beier & G. Schricker (Eds.), From GATT to TRIPS – The Agreement on Trade-related Aspects of Intellectual Property Rights, p. 242, Weinheim: VCH
- Heinemann, A. (1999), Problems of Intellectual Property Rights and Competition Policy The Approach of the Working Group on Trade and Competition, in R. Zäch (Ed.), Towards WTO Competition Rules Key Issues and Comments on the WTO Report (1998) on Trade and Competition, p. 312, The Hague: Kluwer Law
- Heinemann, A. (2002), Immaterialgüterschutz in der Wettbewerbsordnung, Tübingen: Mohr Siebeck
- Hollman, H. & Kovacic, W. (2011), The International Competition Network: Its Past, Current and Future Role, 20 Minn. J. Int'l L. 2011, 274, Minneapolis: University of Minnesota Law School
- Kur, A. & Levin, M. (2011), Intellectual Property Rights in a Fair World Trade System Proposals for a Reform of TRIPs, Cheltenham: Edward Elgar
- Lim, D. (2014), Reverse Payments Life After Actavis, 45 IIC 2014, 1, Munich/Berlin: C.H. Beck/Springer
- Lundqvist, B. (2014), Standardization under EU Competition Rules and US Antitrust Laws The Rise and Limits of Self-Regulation, Cheltenham: Edward Elgar
- Max Planck Institute (2013), Copyright, Competition and Development, Study in Copyrightrelated Markets on behalf of the World Intellectual Property Organization (WIPO)
- Monti, G. (2002), Article 81 EC and Public Policy, 39 CML Rev. 1057, Alphen aan den Rijn: Wolters Kluwer
- OECD (1998), Recommendation of the Council Concerning Action Against Hard Core Cartels, OECD-Doc. C(98)35/FINAL
- OECD (1999), Competition Elements in International Trade Agreements: A Post-Uruguay Round Overview of WTO Agreements, Document COM/TD/DAFFE/CLP(98)26/FINAL
- Picht, P. (2013), Strategisches Verhalten bei der Nutzung von Patenten in Standardisierungsverfahren aus der Sicht des europäischen Kartellrecht, Berlin: Springer
- Picht, P. (2015), From Transfer of Technology to Innovation Through Access, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles (p. 509), Heidelberg: Springer (this volume)
- Ricolfi, M. (2006), Is there an Antitrust Antidote against IP Overprotection within TRIPS?, 10 Marquette Intell. Prop. L. Rev. 2006, 305, Marquette: Marquette University Law School
- Roffe, P. & Spennemann, C. (2008), Control of Anti-competitive Practices in Contractual Licenses under the TRIPs Agreement, in C.M. Correa & A.A. Yusuf (Eds.), Intellectual Property and International Trade The TRIPS Agreement, p. 317, The Hague: Kluwer Law
- Roffe, P. (2014), Intellectual Property Chapters in Free Trade Agreements: Their Significance and Systemic Implications, in J. Drexl, H. Grosse Ruse-Khan & S. Nadde-Phlix (Eds.), EU Bilateral Trade Agreements and Intellectual Property: For Better or Worse?, Heidelberg: Springer
- Rubinfeld, D.L. & Maness, R. (2005), The Strategic Use of Patents: Implications for Antitrust, in F. Lévêque & H. Shelanski (Eds.), Antitrust, Patents and Copyright EU and US Perspectives, p. 85, Cheltenham: Edward Elgar

- Schumpeter, J.A. (1942), Capitalism, Socialism and Democracy, New York/London: Harper Tapia, C. (2010), Industrial Property Rights, Technical Standards and Licensing Practices
- (FRAND) in the Telecommunications Industry, Köln: Heymanns
- Townley, C. (2009), Article 81 EC and Public Policy, Oxford: Hart Publishing
- U.S. Department of Justice & Federal Trade Commission (2010), Horizontal Merger Guidelines, p. 23
- Ullrich, H. & Heinemann, A. (2007), Die Anwendung der Wettbewerbsregel auf die Verwertung von Schutzrechten und sonst geschützten Kenntnissen, in U. Immenga & E.-J. Mestmäcker (Eds.), Wettbewerbsrecht, Band I. EG/Teil 2, Kommentar zum Europäischen Kartellrecht, p. 146. Munich: C.H. Beck
- Ullrich, H. (2005), Expansionist Intellectual Property Protection and Reductionist Competition Rules: A TRIPS Perspective, in K.E. Maskus & J.H. Reichman (Eds.), International Public Goods and Transfer of Technology under a Globalized Intellectual Property Regime, p. 736, Cambridge: Cambridge University Press
- Ullrich, H. (2013), Strategic Patenting by the Pharmaceutical Industry: Towards a Concept of Abusive Practices of Protection, in J. Drexl & N. Lee (Eds.), Pharmaceutical Innovation, Competition and Patent Law – A Trilateral Perspective, p. 244, Cheltenham: Edward Elgar
- Ullrich, H. (2015), The Political Foundations of TRIPS Revisited, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles (p. 85), Heidelberg: Springer (this volume)
- UNCTAD-ICTSD (2005), Resource Book on TRIPS and Development, Geneva: ICTSD
- WIPO (2010), Patent Related Flexibilities in the Multilateral Legal Framework and Their Legislative Implementation at the National and Regional Levels, WIPO-Doc CDIP/5/4 Rev., Geneva: WIPO
- WIPO (2011), World Intellectual Property Report The Changing Face of Innovation, p. 23, Geneva: WIPO
- WTO (1998), Report of the Working Group on the Interaction between Trade and Competition Policy to the General Council, WT/WGTCP/2
- Wu, T. (2012), Taking Innovation Seriously: Antitrust Enforcement if Innovation Mattered Most, 78 Antitrust L.J. 2012, 303, Chicago: American Bar Association
- Yusuf, A.A. (2008), TRIPS: Background, Principles and General Provisions, in C.M. Correa & A.A. Yusuf (Eds.), Intellectual Property and International Trade The TRIPS Agreement, p. 15, The Hague: Kluwer Law
- Zimmer, D. (2012), The Goals of Competition Law, Cheltenham: Edward Elgar

How Public Is the Public Domain? The Perpetual Protection of Inventions, Designs and Works by Trademarks

Kaya Köklü and Sylvie Nérisson

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Abstract There are plenty of trademarks consisting of product shapes that effectively deter competition, although the original work or the invention giving the shape to the product (and to the trademark) is already in the public domain and should be free to be used by anyone.

Trademark laws typically contain provisions declaring certain kinds of trademarks not protectable on the basis of absolute grounds for refusal. However, the legal practice reveals that these mechanisms within the trademark laws are not sufficient to safeguard the public domain. Companies frequently try to deter free competition by registering trademarks consisting of the shape of a product after they lose the exclusivity in the patent, industrial design or work that gave its value to the product and meanwhile belongs to the public domain. This problem occurs in particular in relation to popular inventions, but also to designs or characters of

Dr. Kaya Köklü and Dr. Sylvie Nérisson are Senior Research Fellows at the Max Planck Institute for Innovation and Competition, Munich.

K. Köklü (⋈) • S. Nérisson

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works that are of high commercial value. Not only in developing countries, courts seem to hesitate assessing an invention, design or work to be part of the public domain if the popularity and value of the product are significant.

The most appropriate approach to solve this problem is to introduce an international mandatory regulation that overarches all intellectual property rights and explicitly safeguards the public domain. Such general principle in international law should particularly ensure that the free use of inventions, designs or works is not affected by trademarks once the underlying intellectual property right expires.

1 Introduction

"How is it possible for one to own the stars?", the Little Prince asks the businessman.

"To whom do they belong?", the businessman retorts, peevishly.

"I don't know. To nobody."

"Then they belong to me, because I was the first person to think of it", the businessman answers, in *The Little Prince* by Antoine de Saint-Exupéry, which became part of the public domain at the end of 2014 in most countries.

The public domain belongs to nobody because works and inventions that are part of the public domain are not, or no longer, protected. These are, however, negative definitions only. There is a need for a positive recognition and protection of the free use of inventions, designs and works that are in the public domain, emphasizing that no one can privatize what belongs to everybody.

In theory, anything in the public domain¹ should be free to be used. This is a principle which generally applies equally to patented inventions, industrial designs and copyright-protected works. Once the relevant intellectual property right expires, the underlying invention, design or work should become part of the public domain.

¹ The authors refer in this chapter to public domain in the meaning of Art. 18(1) Berne Convention (binding TRIPS signatories according to Art. 9 TRIPS Agreement), and in the meaning Pamela Samuelson calls "constitutionally protected public domain", or "PD 3", in P. Samuelson (2006), Enriching Discourse on Public Domain, 55 Duke L.J. 2006, 111, 113 et seq. The constitutional protection is enshrined in Article I, Section 8, Clause 8 of the United States Constitution, which empowers the United States Congress "to promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries". Alexander Peukert also considers that the German Fundamental Law protects the free use and availability of works and patents belonging to the public domain; cf. A. Peukert (2012), Die Gemeinfreiheit: Begriff, Funktion, Dogmatik, pp. 72 et seq. Beyond US and German laws, the authors consider in this chapter the public domain as consisting in industrial designs, works and inventions no longer protected by intellectual property rights after their term of protection has expired.

In practice, however, right holders often try to maintain their exclusivity over their inventions, designs or works, although the underlying intellectual property right has expired. This particularly applies to products embedding patents, designs or works that are still popular and of a significant commercial value. Some right holders successfully prevent competitors from using their inventions, designs or works that are in the public domain by registering trademarks that exclusively consist of the shape of a product or a character of a work.

This problem cannot be solved within the frame of existing trademark laws. There is a need for a positive and mandatory protection of the public domain on an international level, overarching all intellectual property rights.

2 The Different Rationales of Trademarks and Other Intellectual Property Rights

The system of trademark protection aims *inter alia* at providing the foundations for fair competition by enhancing market transparency.³ Trademarks thereby particularly allow for competition of price and quality, enabling market participants like consumers to distinguish the products of one provider from those of another.⁴

²Cf. in the copyright field: S. Dusollier (2010), Scoping Study on Copyright and Related Rights and the Public Domain, WIPO study CDIP/4/3/REV./STUDY/INF/1; V.-L. Benabou & S. Dusollier (2007), Draw Me a Public Domain, in P. Torremans (Ed.), Copyright Law: A Handbook of Contemporary Research, pp. 161-184. In the trademark law field: M. Senftleben (2013), Public Domain Preservation in EU Trademark Law - A Model for Other Regions?, 103 TMR 2013, 778. M. Senftleben (2013), Trademark Law and the Public Domain, in D. Beldiman (Ed.), Access to Information and Knowledge, pp. 112-138, with copious references to relevant literature. Regarding IP in general, cf. A. Peukert (2012), Die Gemeinfreiheit: Begriff, Funktion, Dogmatik, pp. 75 et seq. and, on trademark law, at pp. 23-30; see also T. Dreier (2001), Balancing Proprietary and Public Domain Interests: Inside or Outside of Proprietary Rights, in R. Dreyfuss et al. (Eds.), Expanding Boundaries of Intellectual Property, pp. 295-316. See as well recommendation 20 of the 45 recommendations adopted during the General Assembly of WIPO in 2007, "WIPO development agenda" (available at: http://www.wipo.int/ip-development/en/ agenda/recommendations.html). See also Dinwoodie and Dreyfuss, who warn against the constraints of currently applicable international law that supports the growing commodification of the "Domain of Accessible Knowledge" and may block the attempts of national reformers to forge a robust public domain: G.B. Dinwoodie & R. Cooper Dreyfuss (2006), Patenting Science: Protecting the Domain of Accessible Knowledge, in L. Guibault & B. Hugenholtz (Eds.), The Future of the Public Domain, pp. 191-221.

³ Opinion of Advocate General Maciej Szpunar in the case ECJ, Hauck GmbH & Co. KG v. Stokke A/S. Stokke Nederland BV, Peter Opsvik and Peter Opsvik A/S, C-205/13, EU:C:2014:2233, para. 30. Also M. Senftleben (2013), Adapting EU Trademark Law to New Technologies - Back to Basics?, in C. Geiger (Ed.), Constructing European Intellectual Property: Achievements And New Perspectives. ⁴ Opinion of General Advocate Maciej Szpunar in the case ECJ, Hauck GmbH & Co. KG v. Stokke A/S. Stokke Nederland BV, Peter Opsvik and Peter Opsvik A/S, C-205/13, EU:C:2014:2233, para. 31.

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These general goals mark a clear difference between trademarks and other intellectual property rights, which are designed to foster creativity (copyrights and design rights) or innovation (patent rights).⁵

Intellectual property rights like patents, design rights or copyrights provide their owners with some exclusive rights whose primary effect is the temporary elimination of product competition. During the term of protection, only the right holder⁶ has the exclusive right to exploit the invention, the design or the work. The underlying rationale is that the term of protection is deemed sufficient to provide the desired incentives for innovation and creativity.⁷

Granting exclusive intellectual property rights for a limited time can also be described as a corollary of the constant enrichment of the public domain. The system is based on the idea of give and take between the inventor or creator and the public. While the inventor or creator benefits from the granted right to exclude competition for her invention or work, the public benefits from getting free access to and use of the invention or work once the granted terms of protection expire; and it is worth mentioning that the public includes the inventors and creators of tomorrow's milestone inventions, designs and works. Irrespective of the discussion of whether the granted terms of protection are too long or too short, the basic idea behind the system appears to be fairly balanced and equitable.

Trademark law, however, is not part of the described reciprocal system. It is not a principal goal of trademark law to eliminate competition on the market. As already stated above, trademarks are an important tool to enhance market transparency in order to achieve fair competition. Trademarks are supposed to help market participants to make an informed decision concerning the selection of products offered by different providers. The temporary elimination of product competition

⁵ Ibid., para. 35. This utilitarian understanding may not fit with the Continental conception of authors' rights, but this discussion is left aside as it would touch problems that are not the subject of this paper.

⁶ And/or her licensee(s).

⁷ Notwithstanding the heated discussion in copyright law on the length of the terms of protection for works like computer software, press articles, scientific works etc.; cf. R.M. Hilty (2007), Sündenbock Urheberrecht?, in A. Ohly & D. Klippel (Eds.), Geistiges Eigentum und Gemeinfreiheit, pp. 107-145, especially at pp. 130 et seq.; R. Stallman (2010), Misinterpreting Copyright – A Series of Errors, Free Software, Free Society – Selected Essays of Richard M. Stallman, pp. 111-120; on the economic analysis of the duration of copyright protection, A. Bischoffshausen (2013), Die ökonomische Rechtfertigung der urheberrechtlichen Schutzfrist. See also K. de la Durantaye (2012), Der Kampf um die Public Domain, GRUR Int. 2012, 989-994.

⁸ M. Senftleben (2013), Public Domain Preservation in EU Trademark Law – A Model for Other Regions?, 103 TMR 2013, 775, 781.

⁹ Opinion of General Advocate Maciej Szpunar in the case ECJ, Hauck GmbH & Co. KG v. Stokke A/S. Stokke Nederland BV, Peter Opsvik and Peter Opsvik A/S, C-205/13, EU:C:2014:2233, para. 30; N.S. Economides (1988), The Economics of Trademarks, 78 TMR 1988, 523-539.

¹⁰ Economists speak of reducing search costs for the consumer; cf. R.A. Posner (2005), Intellectual Property: The Law and Economics Approach, 19 J. Econ. Persp. 2005, 57-73; N.S. Economides (1988), The Economics of Trademarks, 78 TMR 1988, 523-539.

as a consequence of intellectual property rights like patents, design rights or copyrights is precisely not what trademark law is designed for.¹¹ As, at least in theory, trademark law should not affect product competition, there are consequently no concerns in granting perpetual trademark protection.¹²

3 The Problem

Although the theory briefly described above seems to be fair and reasonable, the reality is different. There are plenty of cases worldwide where the free use of creations, designs and inventions which should belong to the public domain is hindered by registered trademarks. ¹³

Many decisions and pending cases linked to the conflict between intellectual property protection and the public domain are based on disputes in the USA^{14} and Europe. ¹⁵

¹¹ On the other hand, trademark law and unfair competition law target similar behavior; cf. A. Kur (2014), Trademarks Function, Don't They? CJEU Jurisprudence and Unfair Competition Principles, Max Planck Institute for Innovation & Competition Research Paper No. 14-05.

¹² Cf. Art. 18 in fine TRIPS. Along similar lines: W.M. Landes & R.A. Posner (1988), The Economics of Trademark Law, 78 TMR 1988, 267, 285-286 and M. Senftleben (2013), Public Domain Preservation in EU Trademark Law – A Model for Other Regions?, 103 TMR 2013, 775, 781-782. According to Senftleben, the key question is "whether trademark law offers sufficient safeguards against the acquisition of trademark rights – and potential encroachment upon the public domain – by setting forth strict criteria for determining eligibility for trademark protection. Do the eligibility criteria applied in trademark law offer sufficient room for excluding signs from protection that should remain in the public domain?", at 782.

¹³ Stressing the need for a better protection of free uses against the expanding trade mark protection, in European law, A. Kur (2014), Trademarks Function, Don't They? CJEU Jurisprudence and Unfair Competition Principles, Max Planck Institute for Innovation & Competition Research Paper No. 14-05. See as well V. van Overmeire (2009), Inschrijving als merk van een in het openbaar domein gevallen werk, in A. Cruquenaire and S. Dusollier (Eds.), Le cumul des droits intellectuels, pp. 177-204.

¹⁴ A selection of reported cases from the USA: Cabell v. Zorro Productions, No. C13-449 RSM (D. Wash. 21 Oct. 2014); Sony Pictures v. Fireworks Entertainment, 156 F.Supp.2d 1148 (C.D. Cal. 2001); Zorro Productions, Inc v. Mars, Inc., No. C10-01179 (SC) (N.D. Cal. 2010); Twentieth Century Fox Film Corp. v. Entm't Distrib., 34 Fed. Appx. 312 (2002); TrafFix Devices, Inc. v. Marketing Displays, Inc., 121 S. Ct. 1255 (2001); Mktg. Displays, Inc. v. TrafFix Devices, Inc., 11 Fed. Appx. 547 (6th Cir. Mich., 2001); Golan v. Holder, 132 S. Ct. 873 (2012); Edgar Rice Burroughs, Inc. v. Dynamic Forces, Inc. and Savage Tales Entertainment, LLC, No. 12-CI-1192 (S.D. New York 2012).
¹⁵ See for example: BGH (German Federal Supreme Court), GRUR 2008, 71 – Fronthaube; BGH, GRUR 2006 679 – Porsche Boxster; BGH, NJW 2003, 1869 – Winnetous Rückkehr; BGH, NJW 2000, 3355 – Bücher für eine bessere Welt; BGH, GRUR 1978, 302 – Wolfsblut; BPatG (German Federal Patent Court), GRUR 1998, 1021 – Mona Lisa; BPatG, GRUR 2003, 245; BPatG, BeckRS 2012, 11682 – High School Musical; BPatG, GRUR-RR 2012, 121; BPatG, BeckRS 2011, 21622; KG Berlin (Berlin Court Of Appeal), NJOZ 2011, 1722 – Moulin Rouge Story II; OLG (Higher Regional Court) Munich, GRUR-RR 2011, 466 – Moulin Rouge Story I; OLG Munich, ZUM 2009, 654 – Der Seewolf; OLG Dresden, NJW 2001, 615 – Johann Sebastian Bach; OGH

Most of them are related to famous products, like the Lego brick or the Tripp Trapp children's chair, or to well-known literary figures, like Popeye, Zorro or Sherlock Holmes.

3.1 Trademark-Protected Shapes of Products After Expiry of the Underlying Intellectual Property Right

From a European perspective, two cases worth mentioning explicitly are $Lego^{16}$ and $Tripp\ Trapp$. ¹⁷

In both cases, the right holders apparently hoped to find in trademark protection a way to extend the exclusivity they previously enjoyed on the market thanks to the protection of patents.

The *Lego* case, decided by the ECJ in 2010, was about a three-dimensional trademark exclusively consisting of the shape of the famous Lego brick. The Lego brick itself is characterized by its function to be assemblable with other bricks of the same shape.



Lego brick (source: ECJ (2010), Lego Juris A/S v. Office for Harmonization in the Internal Market (OHIM), C-48/09 P at

 $\label{lem:http://curia.europa.eu/juris/document/document.jsf?text=&docid=82838&pageIndex=0&doclang=DE\&mode=lst\&dir=&occ=first\&part=1\&cid=484294)$

The first patent application for the Lego brick dates back to the year 1958. Further patent applications for developments of the Lego brick were filed in the

⁽Austrian Supreme Court) (2010), ZUM 2011, 360 – Österreichische Bundeshymne; ECJ, Hauck GmbH & Co. KG v. Stokke A/S et al., C-205/13, EU:C:2014:2233; ECJ, Lego Juris A/S v. Office for Harmonization in the Internal Market, C-48/09 P, EU:C:2010:516; ECJ, Koninklijke Philips Electronics NV v. Remington Consumer Products Ltd., C-299/99, EU:C:2002:377; ECJ, Windsurfing Chiemsee Produktions- und Vertriebs GmbH v. Boots- und Segelzubehör Walter Huber, C-108/97 and C-109/97, EU:C:1999:230; French Lyon Courts, TGI Lyon, 4 April 2001, RIDA No. 186 (Oct. 2001), p. 421, Court of Appeal Lyon, 20 March 2003, Communications – Commerce Electronique, September 2003, 23, cf. S. Dusollier (2010), Scoping Study on Copyright and Related Rights and the Public Domain, WIPO study CDIP/4/3/REV./STUDY/INF/1, at 68.

¹⁶ ECJ, Lego Juris/OHIM, C-48/09 P, EU:C:2010:516.

¹⁷ ECJ, Hauck GmbH & Co. KG v. Stokke A/S. Stokke Nederland BV, Peter Opsvik and Peter Opsvik A/S, C-205/13, EU:C:2014:2233.

¹⁸ US Patent 3,005,282, applied for on 28 July 1958 claiming priority of an application in Denmark dated 28 January 1958.

following years. The last essential patent covering protection for the Lego brick as shown above expired in 1988.¹⁹ The three-dimensional trademark in dispute was first registered at OHIM in 1999 and finally invalidated in 2010.²⁰

The *Tripp Trapp* case, decided by the ECJ in 2014, was about a trademark exclusively consisting of the shape of a commercially successful kids' chair. The chair itself mainly consists of two parallel legs and two boards between the legs, which are adjustable according to the size of the growing child.



Tripp Trapp chair (source: ECJ (2014), Hauck GmbH & Co. KG v. Stokke A/S. Stokke Nederland BV, Peter
Opsvik and Peter Opsvik A/S, C-205/13 at
http://curia.europa.eu/juris/document/document.jsf?text=&docid=157848&pageIndex=0&doclang=DE&mode=1st&dir=&occ=first&part=1&cid=485468)

The Tripp Trapp chair was designed and first patented in 1972.²¹ The underlying patents expired in 1992. In some jurisdictions, courts confirmed additional copyright protection of the Tripp Trapp chair;²² in some other jurisdictions courts did not.²³ Probably in order to avoid any protection gaps within Europe, the right

¹⁹ US Patent 3,597,875, applied for on 18 November 1968, claiming priority of an application in Denmark dated 29 November 1967.

²⁰The procedural history of the trademark registration and its invalidation is described in ECJ, Lego Juris/OHIM, C-48/09 P, EU:C:2010:516, paras. 7–18.

²¹ Invented by Peter Opsvik from Norway. See US Patent 4,109,961 applied for on 14 April 1975 claiming priority of an earlier application in Norway dated 1 November 1972.

²²BGH, GRUR 2009, 856 – Tripp-Trapp-Stuhl; Norges Høyesterett (Norwegian Supreme Court) (2012), Trumpf AS v. Stokke AS et al. – No. 2011/2020; TGI Paris (first instance, 3rd chamber, 2nd section), 8 November 2013, No. RG 12/00348, unreported. The French decision considered the chair an original creation, and therefore confirmed copyright protection, but the allegedly counterfeiting product was not considered an infringement of Stokke's rights, since the children's chair of Stokke's competitor was not a slavish imitation. The authors thank Benoît Galopin for his help in finding the decision.

²³ Hoge Raad (Dutch Supreme Court), 12 April 2013, Stokke v. Fikszo – LJN BY1532; Hoge Raad, 22. February 2013, Stokke v. H3 – LJN BY1529.

holders applied for three-dimensional Community trademark protection in 1998. It took 16 years to finally invalidate the disputed trademark in 2014.

Both cases have in common that the involved companies tried to prevent product competition by means of trademark registrations. The underlying strategy is both quite simple and effective: Trademark protection is applied for signs which consist of the product's shape itself. This leads to the problem that the typical distinction in trademark law between sign and product is abolished.²⁴ Even a cursory glance at trademark registers of the world reveals that there are hundreds if not thousands of registered trademarks like this.

Through this kind of trademark application strategy, the trademark itself becomes a replica of the relevant products' shape, which hinders competitors from offering a similar or identical product on the market, although the underlying intellectual property right may already have expired and the invention, design or work should in fact be part of the public domain.

3.2 Trademark-Protected Literary Characters After Expiry of the Underlying Copyright Protection

It is interesting to observe that this kind of trademark application strategy does not only apply to trademarks exclusively consisting of the shape of goods. The conflict between trademarks and the public domain also occurs in relation to comic and literary characters formerly protected by copyright.²⁵

A first example concerns the comic figure Popeye. As copyright lasts 70 years after the death of the author²⁶ and Mr. Elzie Crister Segar, the creator of Popeye, died in 1938, Popeye's original adventures have been in the public domain in the EU since 1 January 2009.²⁷ Having a look at various trademark registers creates the impression that the right holders have taken precautions and registered numerous trademarks worldwide before copyright expiry, claiming protection for a large

 $^{^{24}}$ About this need for a strict distinction between the distinctive sign, which distinguishes the product from other products, and the product itself, a question necessarily tricky when it comes to the registrability of the shape or the color of a product, see P. Roubier (1954), Le Droit de la Propriété Industrielle at n° 260.

²⁵ On a similar issue, when trade mark protection arises as a subsequent protection of designs in the specific field of fashion products, see A. Kur (2009), Cumulation of Rights with Regard to Three dimensional Shapes – Two Exemplary Case Studies, in A. Cruquenaire & S. Dusollier (Eds.), Le Cumul des Droits Intellectuels, pp. 155, 166 et seq.

²⁶ Art. 1.1 Directive 2006/116/EC of the European Parliament and of the Council of 12 December 2006 on the term of protection of copyright and certain related rights.

²⁷ In the US, however, the protection still runs, as the comics are assessed to be works made for hire. Hence, copyright in the Popeye stories will last at least until January 2024, since the first publication of Popeye in a comic was in 1929 and the copyright protection lasts the shorter term of either 95 years from the first publication or 120 years from the creation; cf. 17 U.S. Code § 302 c.

variety of goods and services related to the character "Popeye". What is remarkable is that protection is not only claimed for the name "Popeye" as a word mark, but also for the drawing of the Popeye figure as a figurative mark. One does not need a crystal ball to recognize that these kinds of trademarks may be put in place strategically either to deter competitors from even considering to market new Popeye works or to intimidate competitors by initiating costly and time-consuming legal actions against them.

The right holders of Saint-Exupéry's *The Little Prince* seem to have committed themselves to this kind of strategy as well. The copyright protection of the work already expired by the end of 1994 in countries where the copyright protection lasts 50 years post mortem auctoris (as for example in Canada), and it expired in most countries at the end of 2014.²⁸ Nonetheless, the right holders are well prepared to take legal action against any commercial use on the basis of allegedly infringed trademarks which have been registered worldwide for a large number of classes.²⁹ The value of the market for merchandising goods derived from the book, which is presented by its publisher as the most widely translated and sold book in the world after the bible, is likely to be enormous. The registration of trademarks and the exploitation of the popularity of the Little Prince in the form of spin-off merchandise are in the view of the heirs nothing but reasonable and constitute a necessity to uphold the memory of Saint-Exupéry. By doing so, they remain in a position to control a large business and give themselves the necessary tools to hinder any competitive use of the Little Prince. Without trademark registration in the corresponding categories, the heirs would be condemned to share the billion-euro market of the Little Prince with others.

²⁸ Saint-Exupéry died in 1944. The calculation in French law may amount to a longer protection since Saint-Exupéry died on a war mission and French law rewards creators who "died for France" (i.e. as a soldier of the French army, in battle) with an additional 30 years (cf. Art. L. 123-10 CPI). A further extension applies because "Le Petit Prince" was first published during the Second World War, which gives rise to an extension corresponding to the period during which the distribution of books was considered hindered by the military/economic situation (from the outbreak of the war until 1948; cf. L 123-10 CPI). Taking both extensions into account, The Little Prince will reach the French public domain planet only in 2033. D'Agay, the nephew and speaker for Saint-Exupéry's heirs, announced that the work will fall into the US public domain only in 2038; cf. AFP (2014), "Le Petit Prince": 70 ans, un destin en or et pas une ride, L'OBS Culture of 11 April 2013.

²⁹ Cf. S. Carter (2014), Protecting The Little Prince in the Public Domain, Quill & Quire of 26 April 2014 and H. Prolongeau (2010), Le Petit Prince se lance dans les Affaires, Le Point of 23 November 2010. Community TM No. 0554361 applying for a registration in 22 categories, corresponding to the international trademark with the same ID number, and covering 9 categories of the Nice classification. There are at least 5 different international trademarks in the WIPO ROMARIN register, all registered as of the 1990s.

3.3 Insufficiency of Existing Grounds for Refusal in Trademark Law

Trademark regimes usually provide some grounds for refusal of trademark applications, intended to prevent the registration of signs that are in some way problematic. According to many trademark regimes, trademark protection should particularly not be provided for signs that consist exclusively of a shape "which results from the nature of the goods themselves" or "which is necessary to obtain a technical result or gives substantial value to the goods". 31

In the two referred ECJ cases,³² the invalidation of the trademarks consisting of the shape of the Lego brick and the Tripp Trapp chair was based precisely on such provisions in trademark law.

Given the outcome of these two ECJ decisions, one could be inclined to believe that the current trademark system works effectively, as it apparently provides its own mechanisms to invalidate trademark registrations of signs which exclusively consist of the shape of a relevant product and fulfill at least one of the further criteria set forth in the relevant trademark laws. This, however, appears to be true only from a purely theoretical point of view. The reality looks quite different.

Even if in the cases mentioned above the ECJ rendered decisions in favor of the public domain, in each case it took more than a decade to render a final decision and provide legal certainty. In other words, free competition on the relevant product market was affected if not practically excluded by the trademarks for more than 10 years.

Advocate General Ruiz-Jarabo Colomer once stated that "the public interest should not have to tolerate even a slight risk that trade mark rights unduly encroach on the field of other exclusive rights which are limited in time, whilst there are in fact other effective ways in which manufacturers may indicate the origin of a product".³³

In practice, however, there are hundreds if not thousands of registered trademarks out there that potentially have such a distortive effect. All of them purely consist of the shape of a product that was once subject to patent, design or copyright protection.

³⁰ See for example the lists of absolute grounds for refusal in Article 7 of Council Regulation (EC) 207/2009 of 26 February 2009 on the Community trademark, and Art. 6quinquies B of the Paris Convention

³¹ See e.g. Article 7 of Council Regulation (EC) 207/2009 of 26 February 2009 on the Community trademark; Article 3(1)(e) of Directive 2008/95/EC, or Directive 89/104/EEC; Section 3(2) German Trademark Act.

³² ECJ, Hauck GmbH & Co. KG v. Stokke A/S. Stokke Nederland BV, Peter Opsvik and Peter Opsvik A/S, C-205/13, EU:C:2014:2233; ECJ, Lego Juris/OHIM, C-48/09 P, EU:C:2010:516.

³³ ECJ, Linde AG, Winward Industries Inc. and Rado Uhren AG, C-53/01 to C-55/01, EU: C:2003:206, Opinion of Advocate General Ruiz-Jarabo Colomer delivered on 24 October 2002, at 29.

3.4 Need for a Positive Recognition of Free Use of Public Domain Items Outside of Trademark Law

This shows that trying to solve the threat to the public domain caused by perpetual trademark protection merely within the frame of the trademark regime itself has inherent systemic weaknesses. In other words, searching for appropriate solutions only within the trademark system itself appears to be too restricted an approach. The closed lists of reasons to refuse the registration of a sign as a trademark ³⁴ create a sort of strait-jacket and limit the arguments to defend the public domain to grounds that are provided for in the respective trademark laws. And these grounds—or at least the way they are applied in practice—may significantly differ from jurisdiction to jurisdiction.

As seen for example in the *Tripp Trapp* case of the ECJ,³⁵ the Advocate General and the Court noticeably struggled to establish the nebulous criteria of "essential characteristics of the product" which are inherent to its function and "which consumers may be looking for in the products of the competitors".³⁶ According to the ECJ, an absolute ground for refusal may further be given if a "sign ... consists exclusively of the shape of a product with several characteristics each of which may give that product substantial value".³⁷ Both of these criteria set by the ECJ are certainly not easy to assess or apply in practice and they leave significant room for interpretation.³⁸ This particularly applies to the extensive trademark application practice for comic figures that belong to the public domain or at least are about to fall into the public domain.³⁹

Furthermore, it appears that safeguarding the public domain on grounds within the trademark system only will not be effective enough in practice if the underlying invention or work is well known in the market. As already indicated above, the conflict between the public domain and trademark registrations typically occurs with products that are famous and commercially successful even beyond the term of protection provided by patent, design or copyright law. This particularly applies to well-known products like the Lego brick, the Tripp Trapp chair, and those derived from *The Little Prince*, *Popeye*, *Zorro*, *Sherlock Holmes* etc. If the product or work

³⁴ See for example the strict wording of Art. 6quinquies of the Paris Convention: "Trademarks covered by this Article may be neither denied registration nor invalidated except in the following cases" (emphasis added).

³⁵ ECJ, Hauck GmbH & Co. KG v. Stokke A/S. Stokke Nederland BV, Peter Opsvik and Peter Opsvik A/S, C-205/13, EU:C:2014:2233.

³⁶ Ibid., para. 27.

³⁷ Ibid., para. 36.

³⁸ A. Kur (2009), Cumulation of Rights with Regard to Three dimensional Shapes – Two Exemplary Case Studies, in A. Cruquenaire & S. Dusollier (Eds.), Le Cumul des Droits Intellectuels, pp. 155-175.

³⁹ Cf. numerous trademark registrations worldwide consisting of the literary characters Popeye, Zorro, the Little Prince etc. coincide with the approaching expiry of copyright protection in at least one country.

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has become well known by the time it falls into the public domain, national courts may tend to consider the evident popularity of the work as an equivalent of reputation of the sign in the sense of trademark law. There is the non-negligible risk that courts will apply the broad scope of protection for well-known trademarks in infringement proceedings initiated by the right holders to products as well, which in principle should be under the umbrella of the public domain. It is no surprise that courts seem to be hesitating to invalidate trademarks consisting of the shape of famous and commercially high-value products or works' characters. In this regard, one needs to bear in mind that the question of whether an invention, design or work becomes part of the public domain is independent of its commercial value or its reputation. Nonetheless, there are reasons to fear that national courts worldwide have already rendered numerous injunctions on the basis of famous trademark rights, overlooking the fact that the individually acquired reputation of the invention, design or work is different than the substantially required reputation of the sign according to trademark law.

There are additional practical obstacles to overcome if the solution to the problem is sought within the trademark regime only. As indicated above, there are plenty of registered trademarks consisting of product shapes or characters of works. Not all of them may have a deterring effect on competition, particularly if they are registered for goods and services which are not related to the shape of the product or to the artistic expression as such. 42 But whenever famous inventions, designs or works are concerned, even the mere existence of trademarks consisting of related product shapes or literary figures may still cause a significant barrier to free competition. Especially smaller companies are likely to be deterred from taking the risk of using creations and inventions that are no longer protected by design, copyright or patent law, but appear to be locked under a trademark. Claiming the invalidity of some of these trademarks or arguing a non-infringing descriptive use may be successful in the end, but will require a significant investment of time and financial resources. Often raised as a counterclaim in infringement proceedings, invalidity proceedings may drag on for years if not decades before legal certainty is reached. These are years in which the alleged right holder illegitimately but often successfully hinders competitors from entering the market.⁴³

All in all, it has become evident that the existing trademark regimes as such do not provide for sufficient mechanisms to effectively safeguard the public domain. Rather, the public domain needs its own umbrella protection on an international level.

⁴⁰Cf. Art. 6^{bis} Paris Convention, Art. 16 TRIPS.

⁴¹ Cf. several references to relevant German case law: R. Ingerl & C. Rohnke (2010), Markengesetz, § 8 para. 325; K.-H. Fezer (2009), Markenrecht, § 8 para. 273.

⁴² See S. Dusollier (2010), Scoping Study on Copyright and Related Rights and the Public Domain, WIPO study CDIP/4/3/REV./STUDY/INF/1, and the example of the famous Milkmaid painting by Vermeer, which has been trademark registered and held valid for dairy products at p. 50.

⁴³ As apparently happened in the Lego brick case, ECJ, Lego Juris/OHIM, C-48/09 P, EU: C:2010:516.

4 Mandatory Protection of the Public Domain in International Law

The explicit recognition of permitted uses of inventions and works once the underlying intellectual property right has expired seems to be the proper remedy. Due to the overriding value of the public domain, as was accepted at the dawn of design, copyright and patent laws, ⁴⁴ any such explicit recognition should take place on the international level. Also, the fact that international intellectual property treaties so far have been particularly driven by supporters of right holders, and therefore protect predominantly private interests of industries, speaks for a horizontal (i.e. encompassing all intellectual property rights) and international positive recognition and protection of the free use of works and inventions after expiry of the underlying intellectual property right. Indeed, the international level would be the only way to effectively counterbalance this one-sided protection of established right holders.

Based on these considerations, it should become a general principle in international law that the free use of inventions, designs or works, once the underlying intellectual property right has expired, may not be affected by registered trademarks.

Many scholars worldwide have already called attention to the necessity of expressly recalling the obvious but forgotten principle that free use is the rule, and intellectual property protection the exception. However, such general principle protecting the public domain is still not explicitly embedded in international law. Surely, Art. 7 of the TRIPS Agreement offers a ground for a balanced interpretation of intellectual property rights and takes into account the "advantage" to "users of technological knowledge" in terms of social and economic welfare, recalling that the "objectives" of intellectual property rights are their contribution "to the promotion of technological innovation and to the transfer and dissemination of technology". But relying on Art. 7 TRIPS will hardly help to prevent attempts to (re-)monopolize works, designs or inventions which belong to the public domain. The conservative, right holder-friendly position of requiring strict interpretation of limitations of intellectual property rights, as well as the general wording of internationally binding texts

⁴⁴ See S. Dusollier (2010), Scoping Study on Copyright and Related Rights and the Public Domain, WIPO study CDIP/4/3/REV./STUDY/INF/1, and references she gives at 15-17.

⁴⁵ V.-L. Benabou & S. Dusollier (2007), Draw Me a Public Domain, in P. Torremans (Ed.), Copyright Law: A Handbook of Contemporary Research, p. 162; J. Boyle (2008), The Public Domain, p. 184; Justice Brandeis in Int'l News Serv. v. Associated Press, 248 U.S. 215 (1918), 250, at 54; D. Lange (1981), Recognizing the Public Domain, 44 Law & Contemp. Probs. 1981, 147; A. Peukert (2012), Die Gemeinfreiheit: Begriff, Funktion, Dogmatik, pp. 66 et seq. This is the way the "regular" property is often granted, cf. Art. 17(1) in fine Charter of Fundamental Rights of the European Union. Cf. H.-J. Ahrens & M.-R. McGuire (2011), Modellgesetz für Geistiges Eigentum, sec. 2 para. 2 of their proposal.

⁴⁶ Cf. G.B. Dinwoodie & R. Cooper Dreyfuss (2006), Patenting Science: Protecting the Domain of Accessible Knowledge, in L. Guibault & B. Hugenholtz (Eds.), The Future of Public Domain, pp. 220-221.

in the field of intellectual property, makes it necessary to balance the protection of right holders with a positive protection of users' rights. ⁴⁷ Consequently, likewise not sufficient is a mere reference to Art. 17 TRIPS, which provides the option to implement certain limitations to the national trademark laws. Even if the legitimate interests of "third parties" are to be taken into account by signatory countries, an audacious step would need to be taken by the legislature in order for third parties to prevail over the clearer interests of the right holders. ⁴⁸ The mere possibility to limit the scope of trademark rights does not help to effectively safeguard permitted uses of products embedding inventions and works in the public domain, as the application of trademark law in practice shows.

Hence, the overall goal of a provision *de lege ferenda* should be to prevent any circumvention of the freedom to use subject matters belonging to the public domain by means of intellectual property rights, in particular of trademark law.

Concerning the content and scope of such a provision, it must be taken into account that it needs to define the scope of permitted uses of works, designs and inventions belonging to the public domain precisely enough to provide users (and right holders as well) with the required legal certainty. It may, for example, be helpful to explicitly determine that the scope of permitted uses for anyone should correspond to the exploitation rights granted to the right holder during the term of the respective intellectual property protection, obviously except the expired exclusivity.

A French draft law of 2013 could serve as an example.⁴⁹

According to this bill,⁵⁰ the Code de la propriété intellectuelle (CPI)—the book of laws comprising the whole of intellectual property regulations in French law—should begin with the following remarkable sentences:

⁴⁷ R.M. Hilty & S. Nérisson (2012), Overview, in R.M. Hilty & S. Nérisson (Eds.), Balancing Copyright, a Survey of National Approaches, pp. 1-77 and Max Planck Institute for Intellectual Property & Competition Law Research Paper No. 12-05; and on a broader scale pleading for binding ceilings on an international scale, H. Grosse Ruse-Khan & A. Kur (2008), Enough is Enough - The Notion of Binding Ceilings in International Intellectual Property Protection, Max Planck Institute for Intellectual Property, Competition & Tax Law Research Paper Series No. 09-01.

⁴⁸ Cf. wording of Art. 17 TRIPS.

⁴⁹ The draft is based on a proposal submitted by the Parliament, not by the government. This and the very careful positions currently taken by governments in Europe due to the economic struggle don't allow for hope that the proposal will become law in the near future. The discussion on a draft law intending to implement several EU directives (cf. proposition de loi No. 2319, discussed on 20 and 21 November 2014), with delay, recently gave the opportunity to a Member of the Parliament to try to pass some of these provisions. The amendments were rejected, with a negative opinion of the responsible Minister, who stressed the "philosophical interest" of the debate but also the "dangers" related thereto; cf. 119 Journal official A.N., (C.R.), Débats du 21 Novembre 2014, p. 8997, available at: http://www.assemblee-nationale.fr/14/pdf/cri/2014-2015/20150066.pdf (accessed 28 May 2015).

⁵⁰ Proposition de loi n° 1573 visant à consacrer le domaine public, à élargir son périmètre et à garantir son intégrité, [Bill to codify the public domain, to enlarge its scope and to protect its integrity], Ass. Nat. document, registered on 21 Nov. 2013.

Les créations appartiennent en principe au domaine public, sauf lorsqu'elles constituent des œuvres de l'esprit. . . . Une création ne satisfaisant pas à l'un de ces critères appartient au domaine public. Sont également considérés comme appartenant au domaine public les données, faits, idées, procédures, procédés, systèmes, méthodes d'opération, concepts, principes ou découvertes, quelle que soit la forme dans laquelle ils sont décrits, expliqués, illustrés ou intégrés à une œuvre, ainsi que les lois et décisions judiciaires.

(English translation by the authors:)

Creations belong in principle to the public domain, except if they are works of the mind. ⁵¹ ... A creation that does not comply with the protection requirements belongs to the public domain. The following subject matters belong to the public domain: data, facts, ideas, procedures, processes, systems, operating methods, concepts, principles and discoveries, whatever the form in which they are described, explained, illustrated or integrated in a work, as well as laws and court decisions (Art. 1.1 of the bill, intended to be inserted at the beginning of Art. L. 111-1 of the CPI).

After further mention of elements that should be considered as parts of the public domain, the bill continues with

Lorsqu'une œuvre appartient au domaine public, sa reproduction et sa représentation sont possibles sans restriction. Toute clause contractuelle contraire est considérée comme nulle et nulle d'effet.

(English translation by the authors:)

When a work belongs to the public domain, copy and performance of it are possible without any restriction. Contractual clauses stating the opposite are null and void (Art. 1.3 of the bill).

Also, technical protection measures and DRM may not restrict the permitted uses of works belonging to the public domain (Art. 6 of the bill, to be integrated into Art. L. 331-5 CPI).

The bill further expressly states that in case of the integration of a public domain work in a composite work the rights of the author in the composite work may not be extended to the public domain work (Art. 2 of the bill, to be integrated into Art. L. 113-4 CPI), and if a data base contains public domain works, the right holders of the data base may not prohibit or hinder the extraction or re-use of the public domain works (Art. 8 of the bill, to be integrated into Art. L. 342-1 CPI).

The last but essential point of this bill, which is worthy of full support, is the sanction of enclosures or encroachments of the public domain realm:

Est puni d'un an d'emprisonnement et de 100 000 euros d'amende le fait de porter atteinte à l'intégrité du domaine public en faisant obstacle ou en tentant de faire obstacle à la libre réutilisation d'une œuvre qui s'y rattache ou en revendiquant abusivement des droits sur celle-ci.

(English translation by the authors:)

⁵¹ "Works of the mind", (in French: "œuvres de l'esprit"), is the legal definition of copyright-protected works in French copyright law. Conditions for its protection are its mise en forme, which grossly corresponds to the fixation requirement, and that the work bears the imprint of the author's personality.

Harming the integrity of the public domain by hindering or attempting to hinder the re-use of works of the public domain, or abusive claims of rights in works of the public domain, is punished with a year of prison and a fine of 100 000 euros.⁵²

The wording of the proposal may not be perfectly drafted, as it refers to copyright only. Furthermore, it is a national regulation and not drafted like a provision in an international treaty. But it does serve as a good starting point, particularly as it comes from what is likely the most conservative country regarding authors' rights.

The system provided for in this draft law goes along the line of the proposal presented in this article. Transferring this French approach to all intellectual property rights, it would allow anyone to step into the shoes of the former right holder, once the term of protection for the patent, design right or copyright expires.

This approach would be in line with the currently existing international law. The basic conditions for the protection of the public domain are already in place, particularly in the field of copyright.⁵³

However, an explicit definition of the public domain, as well as the recognition of the principle that once subject matters belong to the public domain, they are freely usable by anyone, no matter if the intended use is for commercial or non-commercial purposes, is still missing. The time has come for such a definition to be integrated into international law, e.g. by a kind of "TRIPS *plus*" agreement.⁵⁴ Furthermore, it is necessary to ensure that this positive right of users may not be limited by other existing intellectual property rights, particularly not by trademark law.

Any such users' right, however, may find its limits in unfair competition rules, which should remain applicable. Competitors remain obliged not to unfairly compete with the previous right holder. Consequently, anyone entering the market with products or works in the public domain should take the necessary steps so as not to mislead consumers. It remains the competitors' obligation to avoid a likelihood of

⁵² These are the maximal punishments. The bill goes further, and beyond the topic addressed in this paper, in two regards. It gives authors the possibility to choose that their works should be considered as belonging to the public domain (which causes certain scholars to worry about the paternalistic sense of the unwaivability of many authors' rights). Secondly, since the bill also intends to promote the use of public domain works, it provides for a register of all public domain works (which raises concerns about the costs for the public body that would have the duty and the honor to map public domain works and reliable sources thereto). Regarding the promotion of public domain works, see S. Dusollier (2010), Scoping Study on Copyright and Related Rights and the Public Domain, WIPO study CDIP/4/3/REV./STUDY/INF/1, at 72.

⁵³ Cf. Art. 18(1) Berne Convention, Art. 9.2. TRIPS Agreement, Art. 2 WCT.

⁵⁴Regarding the need for and the difficulty of giving a positive definition, cf. Senftleben, who already considered this need for a positive definition of the public domain in trademark law. He set the - simply said but harder to achieve - frame for it: "a definition broad enough to lend sufficient weight to the social, cultural, and economic interests ranging from fair competition to freedom of speech, and narrow enough to leave room for the attainment of the objectives underlying trademark protection", M. Senftleben (2013), Public Domain Preservation in EU Trademark Law – A Model for Other Regions? 103 TMR 2013, 775, 778 et seq.

confusion among consumers on the origin of the offered products or works. This can be done by fair labeling, e.g. by using disclaimers or other indicators on the packaging. The competitor may consider distinguishing its products from the previous right holder by its use of color, size and form in labeling.⁵⁵ Whether the conditions on fair labeling are fulfilled needs to be assessed individually by applying ordinary unfair competition rules.

5 Conclusions

As shown above, there is a need for a positive provision safeguarding the public domain against trademarks exclusively consisting of works or of the shape of products whose underlying intellectual property right has already expired.

It is not appropriate to prohibit trademarks consisting of shapes of products or works across the board, as there are still cases conceivable in which such trademarks do not have a deterring effect on competition and the public domain. Any such attempt would likely go beyond the objective pursued.

The most appropriate approach to achieve this goal seems to be a regulation overarching all intellectual property rights and explicitly safeguarding the public domain. Such a regulation would only be effective if it is introduced on an international level and is of a mandatory nature. TRIPS and other international agreements so far only contain general provisions, which—if at all—permit but do not oblige contracting states to introduce a public domain provision into their national laws.

In order to achieve harmonized protection and respect for the public domain in a globalized world, it is desirable to have a common rule in international law. This will help to boost the importance of the public domain in balancing the interests involved with intellectual property rights, particularly in relation to trademark rights.

References

AFP (2014), "Le Petit Prince": 70 ans, un destin en or et pas une ride, L'OBS Culture of 11 April 2013, available at: http://tempsreel.nouvelobs.com/culture/20130411.AFP9490/le-petit-prince-70-ans-un-destin-en-or-et-pas-une-ride.html (accessed 28 May 2015)

Ahrens, H.-J. & McGuire, M.-R. (2011), Modellgesetz für Geistiges Eigentum, Normtext, Munich: Sellier

Benabou, V.-L. & Dusollier, S. (2007), Draw Me a Public Domain, in P. Torremans (Ed.), Copyright Law: A Handbook of Contemporary Research, pp. 161–184, Cheltenham (UK)/Northampton (USA): Edward Elgar Publishing

Bischoffshausen, A. (2013), Die ökonomische Rechtfertigung der urheberrechtlichen Schutzfrist, Baden-Baden: Nomos

⁵⁵ Cf. Kellogg Co. v. National Biscuit Co., 305 U.S. 111 (1938).

- Boyle, J. (2008), The Public Domain, New Haven/London: Yale University Press, also available at: http://thepublicdomain.org/thepublicdomain1.pdf (accessed 28 May 2015)
- Carter, S. (2014), Protecting The Little Prince in the Public Domain, Quill & Quire of 26 April 2014, available at: http://www.quillandquire.com/book-culture/2014/03/26/protecting-the-lit tle-prince-in-the-public-domain/ (accessed 28 May 2015)
- de la Durantaye, K. (2012), Der Kampf um die Public Domain, GRUR Int. 2012, 989, Munich: C.H. Beck
- Dinwoodie, G.B. & Dreyfuss, R.C. (2006), Patenting Science: Protecting the Domain of Accessible Knowledge, in L. Guibault & B. Hugenholtz (Eds.), The Future of the Public Domain, pp. 191–221, Alphen aan den Rijn: Kluwer Law International
- Dreier, T. (2001), Balancing Proprietary and Public Domain Interests: Inside or Outside of Proprietary Rights, in R. Dreyfuss et al. (Eds.), Expanding Boundaries of Intellectual Property, pp. 295–316, Oxford: OUP
- Dusollier, S. (2010), Scoping Study on Copyright and Related Rights and the Public Domain, WIPO study CDIP/4/3/REV./STUDY/INF/1, available at http://www.wipo.int/edocs/mdocs/mdocs/en/cdip 4/cdip 4 3 rev study inf 1.pdf (accessed 28 May 2015)
- Economides, N.S. (1988), The Economics of Trademarks, 78 TMR 1988, 523, New York, NY: INTA
- Fezer, K.-H. (2009), Markenrecht, Munich: C.H. Beck
- Grosse Ruse-Khan, H. & Kur, A. (2008), Enough is Enough -The Notion of Binding Ceilings in International Intellectual Property Protection, Max Planck Institute for Intellectual Property, Competition & Tax Law Research Paper Series No. 09-01, available at SSRN: http://ssrn.com/abstract=1326429 or http://dx.doi.org/10.2139/ssrn.1326429 (accessed 28 May 2015)
- Hilty, R.M. & Nérisson, S. (2012), Overview, in R.M. Hilty & S. Nérisson (Eds.), Balancing Copyright, a Survey of National Approaches, pp. 1–77, Berlin/Heidelberg: Springer. Also Max Planck Institute for Intellectual Property & Competition Law Research Paper No. 12-05, available at SSRN: http://ssrn.com/abstract=2040607 (accessed 28 May 2015)
- Hilty, R.M. (2007), Sündenbock Urheberrecht?, in A. Ohly & D. Klippel (Eds.), Geistiges Eigentum und Gemeinfreiheit, pp. 107–145, Tübingen: Mohr Siebeck
- Ingerl, R. & Rohnke, C. (2010), Markengesetz, Munich: C.H. Beck
- Kur, A. (2009), Cumulation of Rights with Regard to Three dimensional Shapes Two Exemplary Case Studies, in A. Cruquenaire & S. Dusollier (Eds.), Le Cumul des Droits Intellectuels, pp. 155–175, Brussels: Larcier
- Kur, A. (2014), Trademarks Function, Don't They? CJEU Jurisprudence and Unfair Competition Principles, Max Planck Institute for Innovation & Competition Research Paper No. 14-05, available at SSRN: http://ssrn.com/abstract=2401536 (accessed 28 May 2015)
- Landes, W.M. & Posner, R.A. (1988), The Economics of Trademark Law, 78 TMR 1988, 267, New York, NY: INTA
- Lange, D. (1981), Recognizing the Public Domain, 44 Law & Contemp. Probs. 1981, 147, Durham: Duke University School of Law
- Peukert, A. (2012), Die Gemeinfreiheit: Begriff, Funktion, Dogmatik, Tübingen: Mohr Siebeck Posner, R.A. (2005), Intellectual Property: The Law and Economics Approach, 19 J. Econ. Persp. 2005, 57, Nashville, TN: American Economic Association
- Prolongeau, H. (2010), Le Petit Prince se lance dans les Affaires, Le Point of 23 November 2010, available at: http://www.lepoint.fr/culture/le-petit-prince-se-lance-dans-les-affaires-23-11-2010-1266470_3.php (accessed 28 May 2015)
- Roubier, P. (1954), Le Droit de la Propriété Industrielle, Paris: Sirey
- Samuelson, P. (2006), Enriching Discourse on Public Domain, 55 Duke L.J. 2006, 111, Durham: Duke University School of Law
- Senftleben, M. (2013), Adapting EU Trademark Law to New Technologies Back to Basics?, in C. Geiger (Ed.), Constructing European Intellectual Property: Achievements And New Perspectives, pp. 137–176, Cheltenham (UK)/Northampton (USA): Edward Elgar Publishing, available at SSRN: http://ssrn.com/abstract=1875629 (accessed 28 May 2015)

- Senftleben, M. (2013), Public Domain Preservation in EU Trademark Law A Model for Other Regions?, in 103 TMR 2013, 778, New York, NY: INTA, available at SSRN: http://ssrn.com/ abstract=2331598 (accessed 28 May 2015)
- Senftleben, M. (2013), Trademark Law and the Public Domain, in D. Beldiman (Ed.), Access to Information and Knowledge, pp. 112–138, Cheltenham (UK)/Northampton (USA): Edward Elgar Publishing
- Stallman, R. (2010), Misinterpreting Copyright A Series of Errors, Free Software, Free Society Selected Essays of Richard M. Stallman. Boston: Free Software Foundation, available at http://www.gnu.org/doc/fsfs-ii-2.pdf (accessed 28 May 2015)
- van Overmeire, V. (2009), Inschrijving als merk van een in het openbaar domein gevallen werk, in A. Cruquenaire & S. Dusollier (Eds.), Le cumul des droits intellectuels, pp. 177–204, Brussels: Larcier

Dependent Patents Under Art. 31 TRIPS: Lessons from Copyright Law

Matthias Leistner

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Abstract Under the TRIPS regime, compulsory licences for the exploitation of dependent patents are governed by the specific provision of Article 31(I) TRIPS. Hitherto, this provision is of very limited practical relevance; in fact, there is almost no case law and only a little amount of literature on Article 31(I) TRIPS. Essentially, the paper argues in favour of a functional and relative approach to the interpretation of the main Article 31(I) TRIPS condition, i.e. that "(i) the invention claimed in the second (dependent) patent shall involve an important technical advance of considerable economic significance in relation to the invention claimed in the first patent". The paper draws on copyright law doctrine of transformative use to argue that both substantive conditions of Article 31(I)(i) TRIPS should be interpreted consistently with regard to the relation to the primary patent, i.e. a lower threshold should apply if the primary patent embodies only an incremental technical advance.

Prof. Dr. Matthias Leistner, LL.M. (Cambridge) is Professor at the University of Bonn.

M. Leistner (⋈)

Institut für Handels- und Wirtschaftsrecht, Rheinische Friedrich-Wilhelms-Universität Bonn, Bonn, Germany

e-mail: leistner@jura.uni-bonn.de

1 Introduction

Under the TRIPS regime, compulsory licences for the exploitation of dependent patents are governed by the specific provision of Article 31(1) TRIPS. The provision foresees three cumulative conditions that apply in addition to the general conditions of Article 31(a)–(k) TRIPS. Compared to the previous regime under the Paris Convention, ¹ this constitutes a restriction of the freedom of the TRIPS members to grant compulsory licences in dependency cases (see below Sect. 2). Accordingly, the global situation with regard to dependency licences, which had always been characterised by an extremely limited practical significance of this instrument, has not changed in this regard; as a consequence, there is almost no case law and only little literature on Article 31(1) TRIPS (see below Sect. 3). However, the need for a compulsory licencing scheme with regard to dependency situations is imminent in certain fields (see below Sect. 4). This chapter argues from the specific perspective of a comparison to the treatment of free derivative use in copyright law and reaches the conclusion that Article 31(1) TRIPS should be interpreted in a "relative" and flexible manner, resulting in a broader field of application of the provision (see below Sects. 5 and 6).

2 Article 31(l) TRIPS as a Restriction Compared to the Previous International Regime

2.1 The Situation Before Article 31(l) TRIPS

Before the entry into force of Article 31(1) TRIPS, there was considerable leeway for national legislators to grant compulsory licences in situations of dependent patents. The previous regime was governed only by Article 5A Paris Convention (PC), which left PC members wide liberty to foresee compulsory licences for dependent patent holders.² Consequently, in some national legislations, such as the Netherlands or Japan, compulsory dependency licences could (and partly still can) be granted upon the sole condition of the dependent patent holder requiring a licence for the exploitation of his patent and the refusal of the holder of the first patent to grant a licence. In many other PC member states, such as Belgium, Denmark, Finland, France, the United Kingdom, and Sweden, the sole condition of an important technical advance (or substantial contribution to the arts) applied without the additional condition of "considerable economic significance".³ Partly,

¹ Paris Convention for the Protection of Industrial Property of 20 March 1883, as revised and amended (PC)

² See J. Straus (1996), Implications of the TRIPs Agreement in the Field of Patent Law, in F.-K. Beier & G. Schricker (Eds.), From GATT to TRIPs – The Agreement on Trade-Related Aspects of Intellectual Property Rights, pp. 160, 207 et seq. with further references.

³ Ibid.

reservation periods of 3 years after the grant of the first patent were and are foreseen in national laws as an additional restriction, such as in the UK.⁴ In Germany, the general condition of sufficient public interest in the grant of a compulsory licence also applied to the case of dependency licences. At first glance, this previous legal situation with regard to the grant of dependency licences has been "restricted severely vis-à-vis the previous regime" by Article 31(1) TRIPS.⁵

2.2 Article 31(1) TRIPS: Important Technical Advance of Considerable Economic Significance

Compared to the general conditions of Article 31(a)—(k), in the case of dependency licences, Article 31(l)(i) TRIPS provides for the double *additional* condition that "the invention claimed in the second patent shall involve an important technical advance of considerable economic significance in relation to the invention claimed in the first patent". Furthermore, according to Article 31(l)(ii), "the owner of the first patent shall be entitled to a cross-licence on reasonable terms to use the invention claimed in the second patent", and according to Article 31(l)(iii), "the use authorized in respect of the first patent shall be non-assignable except with the assignment of the second patent". Thus, essentially, Article 31(l) TRIPS adds the condition of "considerable economic significance of the invention claimed in the second patent in relation to the invention claimed in the first patent" to the established and widespread condition of an important technical advance in relation to the first patent.

As a consequence, a number of TRIPS member states have amended their national Patent Acts to include the condition of an "important technical advance of considerable economic significance in relation to the invention claimed in the first patent". Particularly, in Europe, partly also in reaction to Article 12 Biotech

⁴ Ibid.; M. Leitzen & T. Kleinevoss (2005), Renaissance der patentrechtlichen Zwangslizenz? – Die Neuregelung des § 24 Abs. 2 PatG, 96 MdP 2005, 198, 199, 204.

⁵ See J. Straus (1996), Implications of the TRIPs Agreement in the Field of Patent Law, in F.-K. Beier & G. Schricker (Eds.), From GATT to TRIPs – The Agreement on Trade-Related Aspects of Intellectual Property Rights, pp. 160, 207; C.M. Correa (2007), Trade Related Aspects of Intellectual Property Rights: A Commentary on the TRIPS Agreement, p. 317.

⁶ These two qualifications apply cumulatively to each other and to the general conditions of Article 31(a) – (k); cf. A. Eikermann (2009), in P.-T. Stoll, J. Busche & K. Arend (Eds.), WTO – Trade-Related Aspects of Intellectual Property Rights, Article 31, fn. 50; F. Hoehne (2013), in J. Busche, P.-T. Stoll & A. Wiebe (Eds.), TRIPS, Internationales und europäisches Recht des geistigen Eigentums – Kommentar, Article 31, fn. 39.

⁷ See the summary report of the answers of the AIPPI national groups to Question 202 "The impact of public health issues on exclusive patent rights", I 6), 2008, Congress in Boston, USA, available at: https://www.aippi.org/download/commitees/202/SR202English.pdf.

Directive,⁸ which foresees a specific compulsory dependency licence with regard to the relationship between prior or secondary patents and plant variety rights under the Article 31(l) TRIPS conditions,⁹ many member states have implemented the TRIPS conditions identically into their national laws. Accordingly, e.g., Sec. 48A (1)(b) UK Patent Act 1977, Article L 613-15 and 613-15-1 French *Code de la Propriété Intelectuelle*, as well as Sec. 24(2) No. 2 German Patent Act, now provide for the essential condition of an important technical advance of considerable economic significance in relation to the invention claimed in the first patent. Other TRIPS members, such as Japan,¹⁰ however still provide for a broader possibility of compulsory dependency licences.¹¹

Against this background, the interpretation of the flexible and cumulative conditions of (1) important technical advance of (2) considerable economic significance in relation to the invention claimed in the first patent becomes of crucial importance as to the "practicability and chances of success of the TRIPS regulation". ¹²

⁸ Directive 98/44/EC of the European Parliament and of the Council of 6 July 1998 on the legal protection of biotechnological inventions, OJ L 213/13-21 of 30 June 1998 (Biotech Directive).

⁹ In the German statute, originally, the new specific conditions of Article 31(1) TRIPS had been cumulated with the "old" general condition of the sufficient public interest. This was criticised in parts of literature as over-restrictive (cf., e.g., J. Straus (1998), Abhängigkeit bei Patenten auf genetische Information – ein Sonderfall?, GRUR 1998, 314, 316 et seq.). At the occasion of the implementation of Article 12 Biotech Directive, the German legislator corrected this mischief and implemented the TRIPS-identical conditions for compulsory licences under Article 12 Biotech Directive across the board for all categories of inventions; cf. Explanatory Memorandum, BT-Drs. 15/1709, p. 13; M. Leitzen & T. Kleinevoss (2005), Renaissance der patentrechtlichen Zwangslizenz? – Die Neuregelung des § 24 Abs. 2 PatG, 96 MdP 2005, 198, 199.

¹⁰ In Japan, under the condition that the compulsory licence must not unreasonably prejudice the legitimate interests of the right holder or exclusive licensees, see Article 92 Japanese Patent Act (Act No. 121 of 1959). In Switzerland, a literal implementation of the Article 31(l) TRIPS conditions in Article 36 Swiss Patent Act (for compulsory dependency licences in the strict sense) is combined with a particularly developed system of further possible compulsory licences (partly also applicable in dependency situations, such as namely for biotechnological research tools, Article 40b Swiss Patent Act).

¹¹ Cf. further on the comparative law perspective M. Leitzen & T. Kleinevoss (2005), Renaissance der patentrechtlichen Zwangslizenz? – Die Neuregelung des § 24 Abs. 2 PatG, 96 MdP 2005, 198, 199, 204 et seq.

¹² J. Straus (1996), Implications of the TRIPs Agreement in the Field of Patent Law, in F.-K. Beier & G. Schricker (Eds.), From GATT to TRIPs – The Agreement on Trade-Related Aspects of Intellectual Property Rights, pp. 160, 208; C. Correa (2007), Trade Related Aspects of Intellectual Property Rights: A Commentary on the TRIPS Agreement, pp. 317 et seq.; cf. also A. Eikermann (2009), in P.-T. Stoll, J. Busche & K. Arend (Eds.), WTO – Trade-Related Aspects of Intellectual Property Rights, Article 31, note 51: "subjective judgment that necessarily involves a range of discretion".

3 Case Law and Literature on Article 31(1) TRIPS

Comparative law analyses under the old regime have revealed that there was almost no case law on the respective national provisions regulating compulsory dependency licences.¹³ This situation has not changed under Article 31(l) TRIPS.¹⁴

As far as can be seen, the only important case on compulsory dependency licences in national law is the German Federal Court of Justice's (Bundesgerichtshof) *Polyferon* case, which was decided under the (old) German general "public interest" condition in 1995. The case involved a new and inventive therapeutical use of an existing and patented medical substance. The new use was of relevance for the medical treatment of the general public and thus, arguably, in the public interest. Accordingly, the German Federal Patent Court had granted a compulsory licence in favour of the holder of the dependent patent on the grounds stated under the former Sec. 24(1) German Patent Act. The Federal Court of Justice nullified this judgment. While the public interest test, according to the Federal Court of Justice, did not demand an outright abusive behaviour of the right holder of the first patent as a precondition of a compulsory licence under Article 31 TRIPS, ¹⁶ still the mere general public interest in the provision of the drug for the new therapeutical use was not sufficient, as it had not been proven that the respective therapeutical need could not be satisfied with existing "more or less equivalent alternative substances". For this reason, according to the Federal Court of Justice, the principle of proportionality guiding the balancing of interests of the right holder of the first patent, on the one hand, and the general public, on the other, demanded the denial of a compulsory licence. 17 This also followed from the underlying principle of absolute substance

¹³ Cf. J. Straus (1996), Implications of the TRIPs Agreement in the Field of Patent Law, in F.-K. Beier & G. Schricker (Eds.), From GATT to TRIPs – The Agreement on Trade-Related Aspects of Intellectual Property Rights, pp. 160, 208 with reference to the reports of the national groups of AIPPI in the AIPPI Yearbook 1988/IX.

¹⁴ Cf. summary report of the answers of the AIPPI national groups to Question 202 "The impact of public health issues on exclusive patent rights", I 6), 2008, Congress in Boston, USA, available at: https://www.aippi.org/download/commitees/202/SR202English.pdf.

¹⁵ Federal Court of Justice (BGH), GRUR 1996, 190 – Polyferon (X ZR 26/92, 5 December 1995); cf. also M. Kern (1996), Recent Federal Supreme Court decisions on Experimental Use and Compulsory Licensing, CASRIP Newsletter – Summer 1996.

¹⁶ Federal Court of Justice (BGH), GRUR 1996, 190, 192 – Polyferon (X ZR 26/92, 5 December 1995). In cases of abusive behaviour of the holder of an upstream essential patent, German and European antitrust laws apply independently of Sec. 24 Patent Act; cf. P. Maume (2015), Compulsory Licensing in Germany, in R.M. Hilty & K.-Ch. Liu (Eds.), Compulsory Licensing – Practical Experiences and Ways Forward, pp. 95 et seq.; M. Lamping (2015), Refusal to Licence as an Abuse of Market Dominance: From Commercial Solvents to Microsoft, in R.M. Hilty & K.-Ch. Liu (Eds.), Compulsory Licensing – Practical Experiences and Ways Forward, pp. 121 et seq.

¹⁷ Federal Court of Justice (BGH), GRUR 1996, 190, 193 – Polyferon (X ZR 26/92, 5 December 1995): ("... ist bei der Interessenabwägung der Grundsatz der Verhältnismäßigkeit zu beachten. Deshalb kann eine Zwangslizenz an einem Arzneimittel nicht zugesprochen werden, wenn das öffentliche Interesse mit anderen mehr oder weniger gleichwertigen Ausweichpräparaten befriedigt werden kann").

protection (*absoluter Stoffschutz*) for substance patents that showed the general objective of the legislator to extend patent protection for new and inventive substances to all future uses of such substances. ¹⁸ In addition, the burden of proof for the—difficult to establish—negative fact that there was no alternative substance with more or less equivalent medical effects was put on the applicant for the compulsory licence. ¹⁹

While this case is an example in point for the overall very restrictive approach to compulsory dependency licences, it still applied the old general public interest test under German law, which has now been replaced for dependency licences by the specific Article 31(l)(i) TRIPS condition of an important technical advance of considerable economic significance in relation to the invention claimed in the first patent (now in Sec. 24(2) German Patent Act). Therefore, the *ratio decidendi* should not be transposed identically to the interpretation of the new Sec. 24(2) German Patent Acts. To sum up, as far as can be seen, recently there has been no specific relevant case law of national supreme courts on Article 31(l) TRIPS (or its respective implementing provisions in national law) at all and only very little case law of national higher courts.²⁰

The comments on Article 31(l) TRIPS in the established textbooks and commentaries on the TRIPS Agreement more or less reflect the hitherto extremely limited practical relevance of the provision. Most authors limit their comments to an explanation of the cumulative character of the conditions in Article 31(l)(i)–(iii) TRIPS and the general structure of the provision. One authors emphasise the flexible character of the test and the resulting range of discretion of the TRIPS members and point out that

 $^{^{18}}$ Ibid.; cf. also P. Krusemarck, Die abhängige Schöpfung im Recht des geistigen Eigentums, pp. 264 et seq.

¹⁹ Ibid., 194.

²⁰ In more recent case law, the only detailed and substantially relevant judgment on the conditions of dependency licences that could be identified in relevant national higher courts' case law is the judgment of the Commercial Court of Berne (Handelsgericht Bern), sic! 2006, 348 -Anschlaghalter III (HG 03 9024, 6 July 2005), where a compulsory licence on the grounds mentioned under Article 36 Swiss Patent Act was denied in a case of minor technical and economic importance. The court emphasised the interdependency and flexibility of the two elements of "important technical advance" and "considerable economic significance" but held that both elements were not present in the case. As for the important technical advance, a relative assessment was applied; nonetheless — insofar similar to the Polyferon case — the claimant could not establish the need for his purely alternative solution. As for the considerable economic significance, the court applied a subjective yardstick, assessing the economic significance from the perspective of the claimant, as well as from the perspective of the consumers. However, according to the court, under both perspectives the condition of economic significance was not fulfilled as the sales figures of the secondary product were remarkably insignificant. A "relative" yardstick, comparing the economic significance for the claimant to the economic harm for the defendant, as it will be proposed here, was not applied.

²¹ Cf., inter alia, A. Eikermann (2009), in P.-T. Stoll, J. Busche & K. Arend (Eds.), WTO – Trade-Related Aspects of Intellectual Property Rights, Article 31, fns. 50 et seq.; F. Hoehne (2013), in J. Busche, P.-T. Stoll & A. Wiebe (Eds.), TRIPS, Internationales und europäisches Recht des geistigen Eigentums – Kommentar, Article 31, fns. 38 et seq.

²² Cf. A. Eikermann (2009), in P.-T. Stoll, J. Busche & K. Arend (Eds.), WTO – Trade-Related Aspects of Intellectual Property Rights, Article 31, fn. 51.

the concept of "considerable economic significance" might be differently evaluated in "developing and developed countries, as well as for small and large companies". ²³ In fact, such attempts to emphasise the flexibilities of the TRIPS regime generally find support in the general TRIPS objectives according to Articles 7 and 8 TRIPS. ²⁴

4 Need for Compulsory Licences in Dependency Situations: Towards a "Relative" and Flexible Interpretation of Article 31(1) TRIPS

As for the factual need for and utility of dependency licences, it has always been emphasised (already for the former national provisions on compulsory licences in cases of dependent patents under the PC regime) that in spite of the extremely limited practice, the mere existence of such provisions might have implications, acting as a psychological "hammer on the wall" to lead the way to successful negotiation of contractual licences for dependent improvement²⁵ and use inventions.²⁶ In particular, with regard to genetic inventions—where the principle of absolute substance protection leads to significant dependency problems concerning innovations in the field of functional genome analysis and genetic diagnostic methods²⁷—an *effective*

²³ C. Correa (2007), Trade Related Aspects of Intellectual Property Rights: A Commentary on the TRIPS Agreement, p. 318; C. Correa & A. Yusuf (1998), Intellectual Property and International Trade: The TRIPS Agreement, p. 212. Cf. generally on the flexibilities in Article 31 TRIPS J.H. Reichman & C. Hasenzahl (2003), Non-voluntary Licensing of Patented Inventions: Historical Perspective, Legal Framework under TRIPS, and an Overview of the Practice in Canada and the USA, UNCTAD-ICTSD Project on IPRs and Sustainable Development, Issue Paper No. 5 of June 2003, pp. 13 et seq.

²⁴ Cf. e.g. G. Van Overwalle (2015), Fair Use: A Workable Concept in European Patent Law?, in R.M. Hilty & K.-Ch. Liu (Eds.), Compulsory Licensing – Practical Experiences and Ways Forward, pp. 421, 425.

²⁵ Cf. on the particular (potential) importance of Article 31(l) TRIPS for improvement inventions C. Correa & A. Yusuf (1998), Intellectual Property and International Trade: The TRIPS Agreement, p. 212.

²⁶ Cf. e.g. A.-M. Schieble (2005), Abhängige Genpatente und das Institut der Zwangslizenz, p. 181; P. Krusemarck, Die abhängige Schöpfung im Recht des geistigen Eigentums, pp. 295 et seq.; J. Straus (1996), Implications of the TRIPs Agreement in the Field of Patent Law, in F.-K. Beier & G. Schricker (Eds.), From GATT to TRIPs – The Agreement on Trade-Related Aspects of Intellectual Property Rights, pp. 160, 208; J.H. Reichman & C. Hasenzahl (2003), Non-voluntary Licensing of Patented Inventions: Historical Perspective, Legal Framework under TRIPS, and an Overview of the Practice in Canada and the USA, UNCTAD-ICTSD Project on IPRs and Sustainable Development, Issue Paper No. 5 of June 2003, pp. 2, 24 (with regard to Article 31 TRIPS in general and with general examples from the U.S. and Brazil).

²⁷ In fact, the very broad absolute protection for gene sequences is a case in point, illustrating the relationship between the scope of patents, determined by the construction of the patent claims, and the need for compulsory licences with regard to dependency situations. In that regard, a broad scope of patents, in particular comprising even more distant equivalents, results in enhancing the

application of the provision on dependency licences could at least contribute to a better balancing of interests between holders of patents on genetic sequences and dependent patents on new functions of such sequences.²⁸ The general need for compulsory licences in the field has been emphasised by several authors in the past.²⁹ Further situations of licensing failure might occur due to anticommons issues in the information technology and other sectors.³⁰ All these different situations are characterised by the fact that the patent system's objective to promote innovation (particularly with regard to dependent use or improvement inventions) risks to be inhibited by the first patent owner's refusal to grant a licence for dependent innovation.³¹ The role of competition law (with its focus on abusive behaviour) to remedy this problem (of a more general nature) is naturally limited³² and should therefore not affect

potential field of dependency situations and thus "will extend the field of compulsory licensing". Cf. H. Ullrich (2015), Mandatory Licensing under Patent Law and Competition Law: Different Concerns, Complementary Roles, in R.M. Hilty & K.-Ch. Liu (Eds.), Compulsory Licensing – Practical Experiences and Ways Forward, pp. 333, 341.

²⁸ This was one of the explicit goals of the European Biotech Directive and its implementation in the new Sec. 24(2) German Patent Act; cf. the Explanatory Memorandum of the German legislator, BT-Drs. 15/1709, pp. 11, 13; A.-M. Schieble (2005), Abhängige Genpatente und das Institut der Zwangslizenz, p. 179; J. Straus (1998), Abhängigkeit bei Patenten auf genetische Information – ein Sonderfall?, GRUR 1998, 314, 317 et seq.; cf. further on the role of obligatory non-exclusive licences to solve the dependency problem with regard to genetic diagnostic methods G. Van Overwalle (2010), Turning Patent Swords into Shares, 330 Science 2010, 1630; I. Huys, G. Matthijs & G. Van Overwalle (2012), The fate and future of patents on human genes and genetic diagnostic methods, 13 Nat. Rev. Genet. 2012, 441, 446; S.E. Koikkara (2010), Der Patentschutz und das Institut der Zwangslizenz in der Europäischen Union, pp. 84 et seq. (with a further example from the field of DNA-sequences); D. Gruss (2010), Patentrechtliche Abhängigkeit und funktionsgebundener Stoffschutz bei biotechnologischen Erfindungen, pp. 385 et seq.

²⁹ Cf. e.g. R.E. Freeburg (2005), No Safe Harbor and No Experimental Use: Is It Time for Compulsory Licensing of Biotech Tools?, 53 Buff. L. Rev. 2005, 351, 408 et seq.; D.C. Hoffman (2004), A Modest Proposal: Toward Improved Access to Biotechnology Research Tools by Implementing a Broad Experimental Use Exception, 89 Cornell L. Rev. 2004, 993, 1036 et seq. ³⁰ Cf. e.g. K.J. Strandburg (2011), Patent Fair Use 2.0, 1 UC Irvine L. Rev. 2011, 265, 296 et seq.; cf. more generally on the need for competition-oriented IP-internal compulsory licences K.-Ch. Liu (2012), The Need and Justification for a General Competition-Oriented Compulsory Licensing Regime, 43 IIC 2012, 679 et seq.

³¹ H. Ullrich (2015), Mandatory Licensing under Patent Law and Competition Law: Different Concerns, Complementary Roles, in R.M. Hilty & K.-Ch. Liu (Eds.), Compulsory Licensing – Practical Experiences and Ways Forward, pp. 333, 340.

³²Consequently, compulsory licences (as an ultimate remedy in competition law) are only reluctantly granted by the Courts on the grounds of competition law, cf. further on the "exceptional circumstances"-test in Europe since the Magill-, IMS Health- and Microsoft-cases and the even more reluctant attitude of the U.S. Supreme Court since Verizon v Trinko P. Maume (2015), Compulsory Licensing in Germany, in R.M. Hilty & K.-Ch. Liu (Eds.), Compulsory Licensing – Practical Experiences and Ways Forward, p. 95; M. Lamping (2015), Refusal to Licence as an Abuse of Market Dominance: From Commercial Solvents to Microsoft, in R.M. Hilty & K.-Ch. Liu (Eds.), Compulsory Licensing – Practical Experiences and Ways Forward, p. 121; M. Leistner (2005), Intellectual Property and Competition Law: The European Development from Magill to IMS Health compared to recent German and US Case Law, 3 ZWeR 2005, 138 et seq.

the interpretation of patent law's rules on compulsory licences in dependency situations.³³ In fact, the resulting need for compulsory licences, particularly with regard to dependent innovation, has already led to attempts in the U.S. literature to construct necessary compulsory licence schemes in patent law by establishing a (distant) parallel to copyright fair use.³⁴

However, the sufficiency of the existing international law framework for dependency licence provisions in national law, which effectively help to incentivise successful licence negotiations in dependency situations where different reasons, such as potential for hold-up and other issues, lead to contract failure, ³⁵ has to be doubted if a restrictive construction of the new two-element test, rooted in the old restrictive public interest criterion, prevails. ³⁶ In particular, the test should not be interpreted in light of a general (absolute) public interest criterion, requiring a preeminent public interest, thus limiting possible compulsory licences to certain cases of exceptional economic impact measured by absolute standards. ³⁷ Instead, in what follows it is argued that a comparatively broad, "relative" construction of the two elements of the test of "important technical advance of considerable economic significance in relation to the invention claimed in the first patent" is preferable, drawing some inspiration from a comparison

³³ H. Ullrich (2015), Mandatory Licensing under Patent Law and Competition Law: Different Concerns, Complementary Roles, in R.M. Hilty & K.-Ch. Liu (Eds.), Compulsory Licensing – Practical Experiences and Ways Forward, pp. 333, 342.

³⁴ Cf. L.R. de Larena (2005), What Copyright Teaches Patent Law About "Fair Use" and Why Universities Are Ignoring the Lesson, 84 Or. L. Rev. 2005, 779, 814 et seq.; the original proposal to adapt copyright fair use to the needs of patent law was made by M.A. O'Rourke (2000), Toward a Doctrine of Fair Use in Patent Law, 100 Colum. L. Rev. 2000, 1177 et seq., and further developed by K.J. Strandburg (2011), Patent Fair Use 2.0, 1 UC Irvine L. Rev. 2011, 265 et seq. Cf. also L.R. de Larena (2005), What Copyright Teaches Patent Law About "Fair Use" and Why Universities Are Ignoring the Lesson, 84 Or. L. Rev. 2005, 779 et seq.; G. Van Overwalle (2015), Fair Use: A Workable Concept in European Patent Law?, in R.M. Hilty & K.-Ch. Liu (Eds.), Compulsory Licensing – Practical Experiences and Ways Forward, pp. 421, 426 et seq.

³⁵ Cf. further M.A. O'Rourke (2000), Toward a Doctrine of Fair Use in Patent Law, 100 Colum. L. Rev. 2000, 1177, 1188 et seq. (on copyright fair use), 1193 et seq., 1203 et seq. (on the [insufficient] reverse doctrine of equivalents and doctrine of blocking patents in U.S. patent law); K.J. Strandburg (2011), Patent Fair Use 2.0, 1 UC Irvine L. Rev. 2011, 265, 297 et seq.

³⁶ See the justified concern of A.-M. Schieble (2005), Abhängige Genpatente und das Institut der Zwangslizenz, pp. 178 et seq.; on the potential of broad and differentiated mechanisms of compulsory licensing in national laws, such as in Switzerland, to prevent unduly restrictive licensing behaviour indirectly, G. Van Overwalle (2010), Turning Patent Swords into Shares, 330 Science 2010, 1630; E. van Zimmeren & G. Van Overwalle (2011), A Paper Tiger? Compulsory License Regimes for Public Health in Europe, 42 IIC 2011, 4 et seq.; cf. with a rather restrictive attitude in German doctrine, e.g. R. Rogge (2006), in G. Benkard (Ed.), Patentgesetz, § 24, fn. 22 with further references; also restrictive P. Krusemarck, Die abhängige Schöpfung im Recht des geistigen Eigentums, pp. 294 et seq.

³⁷ Cf. also H. Ullrich (2015), Mandatory Licensing under Patent Law and Competition Law: Different Concerns, Complementary Roles, in R.M. Hilty & K.-Ch. Liu (Eds.), Compulsory Licensing – Practical Experiences and Ways Forward, pp. 333, 340.

to the copyright free (transformative) use doctrine.³⁸ Fundamental justification for this flexible approach can also be found in the TRIPS guiding principles of Articles 7 and 8, which provide member states with some leeway to manoeuvre in interpreting the substantive TRIPS provisions.

5 Arguments for a "Relative" and Flexible Interpretation of Article 31(1) TRIPS

5.1 Comparison to Copyright Law

Compulsory licences for derivative works or new "value added" uses of copyrighted works in derivative markets are generally not foreseen in existing international, regional, and national copyright laws.

Instead, for derivative works, which substantially derogate from the original work, thus leaving the overall impression of an independent creation (behind which the original entirely fades into the background) and which therefore are no longer a mere adaptation, Continental European copyright law traditionally provides for a doctrine of "free derivative use". ³⁹ Under the U.S. fair use doctrine, a similar case group of transformative fair use has been established by the courts in the framework of the four fair use factors of 17 U.S.C. § 107. ⁴⁰ In general, a *relative yardstick* is

³⁸ Cf. with a more general and very differentiated approach toward a doctrine of fair use in patent law (against the background of U.S. copyright fair use) M.A. O'Rourke (2000), Toward a Doctrine of Fair Use in Patent Law, 100 Colum. L. Rev. 2000, 1177 et seq.; in particular with regard to compulsory licences as a possible outcome of a new "patent fair use"-instrument L.R. de Larena (2005), What Copyright Teaches Patent Law About "Fair Use" and Why Universities Are Ignoring the Lesson, 84 Or. L. Rev. 2005, 779, 814 et seq.; cf. also lately with a more general perspective G. Van Overwalle (2015), Fair Use: A Workable Concept in European Patent Law?, in R.M. Hilty & K.-Ch. Liu (Eds.), Compulsory Licensing – Practical Experiences and Ways Forward, pp. 421, 426 et seq.

³⁹ Apart from this general approach to derivative works, certain specific derivative uses, such as quotations, are of course also exempted in copyright law; cf., e.g., for quotations Article 10 (1) Berne Convention.

⁴⁰ See Campbell v. Acuff-Rose Music, 510 U.S. 569 (1994); cf. on the different concept of transformation in patent law in the wake of In re Bilski (and meanwhile applied beyond computer-related inventions and namely in the field of genetic inventions) I. Huys, G. Van Overwalle & G. Matthijs (2011), Gene and Genetic Diagnostic Method Patent Claims: A Comparison Under Current European and US Patent Law, 19 Eur. J. Human Genetics 2011, 1104 et seq. Cf. generally on the fair use factors in the context of a possible transposition to patent law (and with proposals for genuine patent law fair use criteria) M.A. O'Rourke (2000), Toward a Doctrine of Fair Use in Patent Law, 100 Colum. L. Rev. 2000, 1177, 1198 et seq.; L.R. de Larena (2005), What Copyright Teaches Patent Law About "Fair Use" and Why Universities Are Ignoring the Lesson, 84 Or. L. Rev. 2005, 779, 809 et seq.; K.J. Strandburg (2011), Patent Fair Use 2.0, 1 UC Irvine L. Rev. 2011, 265, 293 et seq.; slightly more sceptical G. Van Overwalle (2015), Fair Use: A Workable Concept in European Patent Law?, in R.M. Hilty & K.-Ch. Liu (Eds.), Compulsory Licensing – Practical Experiences and Ways Forward, p. 421.

applied (under the Continental European doctrine, as well as under the first and third fair use factor in the U.S.) comparing the creativity of the used parts of the original work to the degree of transformative character of the derivative work. 41 Thus, under Continental European doctrine, the more creative the original is, the higher the necessary degree of transformation would have to be to consider the derivative work a "free use" of the original. In line with the utilitarian concept of U.S. copyright law, the case group of free transformative use in the U.S. is even broader. Even certain uses of a work in identical form, but in a completely new context for a product or service in a new market, for which there is a public interest, but where the original right holder has no existent, substantive licensing activity, can be justified as free transformative use. 42 The main factor to evaluate these situations is the question of whether there is substantial harm from the derivative use in question to a potential market (namely, the licensing market) for the exploitation of the original copyrighted work by the right holder. 43 The element of harm to a potential market is assessed rather strictly by the U.S. courts in the most recent cases: specific proof of actual harm to existing licensing activities seems to be required from the right holder.⁴⁴

5.2 Consequences

5.2.1 Consequence for Patent Law: Relative and Flexible Interpretation of Article 31(1) TRIPS

As for Article 31(I) TRIPS, comparison to copyright law doctrine indirectly strengthens the argument for a relative and flexible construction of the two elements of an important technical advance of considerable economic significance in relation to the invention claimed in the first patent.

As for the element of an important technical advance, certain differences between the innovative processes regulated in copyright law on the one hand and patent law on the other, make a direct and concrete comparison difficult and

⁴¹ As an example for the Continental European approach, see the German Federal Court of Justice (BGH), GRUR 1958, 500, 502 – Mecki-Igel (I ZR 49/57, 1 April 1958) for the traditional authority on the "fade into the background" test (Verblassenstheorie); under the first three elements of the U.S. fair use doctrine, a similar approach can be identified, e.g. in Campbell v. Acuff-Rose Music, 510 U.S. 569, 579 ff. (1994) (on transformative use through parody).

⁴² Cf. Núñez v. Caribbean Int'l News Corp., 235 F.3d 18, 22 f. (1st Cir. 2000); Kelly v. Arriba Soft, 336 F.3d 811, 818 f. (9th Cir. 2003); Bill Graham Archives v. Dorling Kindersley Ltd., 448 F.3d 605, 608 ff. (2d Cir. 2006); Field v. Google, Inc., 412 F.Supp.2d 1106, 1118 ff. (D. Nev. 2006); Perfect 10, Inc. v. Amazon.com, Inc., et al., 508 F.3d 1146, 1155 (9th Cir. 2007).

⁴³ Cf. also Harper & Row v. Nation Enterprises, 471 U.S. 539, 566 (1985): "undoubtedly the single most important element of fair use".

⁴⁴ See Perfect 10, Inc. v. Amazon.com, Inc., et al., 508 F.3d 1146, 1168 (9th Cir. 2007): potential harm that is not actually proven remains hypothetical and thus irrelevant for the fourth factor.

unsuitable. 45 Thus, while copyright law protects individual personal creations, patent law regulates the field of applied technical inventions and their exploitation, i.e. innovative processes which are very often characterised by an incremental development of inventions and their further application in comparatively small iterative and interconnected steps. Due to this more applied nature of patent law, the patent law three-step test in Article 30 TRIPS also explicitly mentions the legitimate interests of third parties which have to be taken into account when designing exceptions and limitations in patent law. This certainly requires adaptations with regard to a possible transposition of copyright law doctrines to patent law.

However, the general guiding principle that a *relative* (i.e., comparative) assessment, comparing the technical advance involved in the first invention to the technical advance brought about by the second work/invention, is an adequate starting point to balance the interests of the involved parties in cases of derivative creativity or innovation can nonetheless be transposed from established copyright doctrine to the interpretation of the element of "an important technical advance in relation to the invention claimed in the first patent". 46 Thus, the comparison to copyright law, at least on principle, strengthens the prevailing opinion in legal doctrine on Article 31(1) TRIPS, as well as its implementing provisions in national laws, that a relative assessment is necessary with regard to the element of an important technical advance and that the old and restrictively interpreted general condition of an imminent public interest must not be read into this concept.⁴⁷ Instead, compliant with the wording of the provision and the general principles of TRIPS, a relative and flexible yardstick should be applied, due to which the technical advance brought about by the invention, claimed in the first patent, should be compared to the technical advance, added to this by the invention, claimed in the second patent. If the second invention, compared to the first invention, constitutes an important innovative advance, this should be sufficient to fulfil the first element

⁴⁵ Cf. with proposals for a general doctrine of patent fair use in U.S. law, adapting the fair use factors to the specifics of patent law, the references above (fn. 40). Cf. also the attempt to compare the doctrines in German literature by K. Wegmann (2013), Der Rechtsgedanke der freien Benutzung des § 24 UrhG und die verwandten Schutzrechte, pp. 360 et seq.; cf. further the attempt to transfer economic models in patent law to copyright law by P. Krusemarck, Die abhängige Schöpfung im Recht des geistigen Eigentums, pp. 158 et seq.; C. Wolff (2005), Zwangslizenzen im Immaterialgüterrecht, pp. 37 et seq.

⁴⁶With an even more direct parallel to copyright law C. Wolff (2005), Zwangslizenzen im Immaterialgüterrecht, p. 41; recently with a justified qualification and adaptation of this position to the specifics of German patent law, K. Wegmann (2013), Der Rechtsgedanke der freien Benutzung des § 24 UrhG und die verwandten Schutzrechte, p. 368 (both on German patent law). Cf. also with a slightly more direct parallel with regard to improvement patents K.J. Strandburg (2011), Patent Fair Use 2.0, 1 UC Irvine L. Rev. 2011, 265, 297 et seq.; M.A. O'Rourke (2000), Toward a Doctrine of Fair Use in Patent Law, 100 Colum. L. Rev. 2000, 1177, 1208 (in the context of their proposed patent fair use concepts).

⁴⁷ Cf. in literature C. Correa (2007), Trade Related Aspects of Intellectual Property Rights: a Commentary on the TRIPS Agreement, p. 317; C. Correa & A. Yusuf (1998), Intellectual Property and International Trade: The TRIPS Agreement, p. 212.

of Article 31(1)(i) TRIPS. As for the specification of this test, however, the differences between the innovative processes, regulated by copyright law on the one hand and patent law on the other, have to be taken into due account. Thus, in particular, in patent dependency situations, even a smaller incremental innovation (by the second invention) can be sufficient as an important technical advance, if it fully activates the innovation potential of a very fundamental first invention by improving or applying this former, still rather abstract technical advance and thus making the first invention work properly, efficiently or substantially broadening its utility.⁴⁸

As for the element of a "considerable economic significance in relation to the invention claimed in the first patent", the comparison to the interpretation of the first and fourth elements of the U.S. fair use test, concerning the character of the use and the effect of the use upon the potential market for or value of the copyrighted work, can provide for some indirect guidance.⁴⁹ With regard to the fourth element, more recent judgments have required actual proof of a possible concrete damage to existing licensing activities of the copyright holder of the original work.⁵⁰ At the same time, as for the public interest in certain new use forms, which might be considered in favour of an admissible dependent transformative use (first element), the general public interest in socially useful services was regarded as sufficient by the courts without requiring a particularly overwhelming or imminent public interest. 51 With regard to patent law, where the legitimate interests of third parties are even explicitly mentioned in the framework of the three-step test of Article 30 TRIPS, this implies that in situations, where licensing failure might prevent the emergence of a socially useful (application or improvement) product or service, the barrier of the necessary public interest should not be set too high. Again, this shows that the old restrictive assessment of the public interest criterion with regard to the general conditions of compulsory licences in many national Patent Acts, requiring an imminent public interest of particular importance, should not be transposed to the new and specific criteria for dependency licences in patent law. Typically, the important technical advance brought by the second invention should be regarded

⁴⁸ H. Ullrich (2015), Mandatory Licensing under Patent Law and Competition Law: Different Concerns, Complementary Roles, in R.M. Hilty & K.-Ch. Liu (Eds.), Compulsory Licensing – Practical Experiences and Ways Forward, pp. 333, 340 et seq.; still less differentiated in that respect M. Leistner (2015), The Requirements for Compulsory Licences: Learning from the Transformative Use Doctrine in Copyright Law, in R.M. Hilty & K.-Ch. Liu (Eds.), Compulsory Licensing – Practical Experiences and Ways Forward, pp. 221 et seq. (in a former version of this paper).

⁴⁹ Cf. under a general perspective of copyright and patent fair use also M.A. O'Rourke (2000), Toward a Doctrine of Fair Use in Patent Law, 100 Colum. L. Rev. 2000, 1177, 1207 et seq., who identifies "the impact of the use on incentives and social welfare" as the most important fair use factor in patent law and compares it to the similar (fourth) fair use factor in copyright law.

⁵⁰ See above fn. 44.

⁵¹ Perfect 10, Inc. v. Amazon.com, Inc., et al., 508 F.3d 1146, 1155, 1165 (9th Cir. 2007): "search engine provides social benefit by incorporating an original work into a new work, namely, an electronic reference tool", thus making the use by the search engine "highly transformative".

as a sufficient public interest.⁵² As for the additional assessment of the relative economical effects of the dependent use, a *concrete* economic analysis of the impact of this use upon the potential market for or value of the dominant patent should be carried out. As a matter of course, this assessment has to consider the fact that in the case of Article 31(l) TRIPS and its implementations in national law, the right holder shall be paid adequate remuneration, taking into account the economic value of the authorisation (Article 31(h) TRIPS). When this is considered, the economic analysis of potential harm to the economic exploitation interest of the holder of the original patent boils down to the assessment of the question whether the potential welfare gain through use of the invention, claimed in the dependent patent, is larger than the potential harm to the holder of the first patent. This is because if the holder of the second patent can realise the welfare gain embodied in the underlying improvement or use invention, this gain will be larger than the potential harm to the holder of the first patent who could therefore—in the specific case of dependency licences—be fully compensated for his loss under the terms of an adequate remuneration.⁵³

Of course, such concrete assessment will often be hard for the competent authority or the courts to make, and therefore such interpretation of the element of a considerable economic significance will not necessarily make the national provisions on compulsory licences in cases of dependent inventions more effective in practice. Also, transaction costs have to be taken into account and ex ante effects of a too broadly framed provision on possible compulsory licences in dependency situations have to be borne in mind.⁵⁴ Moreover, further considerations will be necessary to identify more specific types of licensing failure in dependency situations. Therefore, even on the basis of the proposed concrete economic analysis, the instrument of compulsory dependency licences will presumably remain of comparatively limited practical relevance with regard to the future grant of such compulsory licences through the competent authorities or the courts.⁵⁵

⁵² Cf. also H. Ullrich (2015), Mandatory Licensing under Patent Law and Competition Law: Different Concerns, Complementary Roles, in R.M. Hilty & K.-Ch. Liu (Eds.), Compulsory Licensing – Practical Experiences and Ways Forward, pp. 333, 340.

⁵³ Cf. also L.R. de Larena (2005), What Copyright Teaches Patent Law About "Fair Use" and Why Universities Are Ignoring the Lesson, 84 Or. L. Rev. 2005, 779, 814 et seq. (in favour of a possible compulsory licence scheme, based on "fair use" in patent law and proposing a related factor for a future statutory patent fair use test). As for the (undeniable) problems in determining the amount of "adequate remuneration" cf. further K.-Ch. Liu (2012), The Need and Justification for a General Competition-Oriented Compulsory Licensing Regime, 43 IIC 2012, 679, 695 et seq., with further references.

⁵⁴ Cf. generally on the relationship between compulsory dependency licences and the economic rationale behind patent law C. Pohl (2000), Die Voraussetzungen der patentrechtlichen Zwangslizenz – Eine Untersuchung unter besonderer Berücksichtigung ihrer europarechtlichen Vorgaben, der Pariser Verbandsübereinkunft und des TRIPS-Abkommens, p. 244 with further references.

⁵⁵ Cf. on the question, which institution should administer the granting of IP-internal compulsory licences K.-Ch. Liu (2012), The Need and Justification for a General Competition-Oriented Compulsory Licensing Regime, 43 IIC 2012, 679, 697, arguing that courts are best situated to administer such compulsory licences.

However, on principle, the *relative* and concrete economic approach to the element of considerable economic significance, which has been proposed here instead of a more restrictive approach (interpreting the element as a limitation to certain cases of exceptional economic impact by absolute standards), ⁵⁶ would certainly improve the indirect (psychological) ex ante effects of the instrument of compulsory dependency licences. On that basis the instrument would certainly better contribute to the solution of specific situations of licensing failure by incentivising licence negotiations and would thus at least make the instrument gradually more effective in order to reach the goal of an efficient patent law framework, especially with regard to genetic, biotechnological and IT inventions. ⁵⁷

5.2.2 Consequence for Copyright Law: Introduction of Compulsory Licence Provisions

The comparison of copyright and patent law also highlights that while in patent law compulsory licences at least exist as a potential means to balance the interests of right holder and secondary user in cases of dependent inventions, the general copyright law approach to derivative works is characterised by a "black-and-white" picture of either a (more or less limited) exemption for free transformative use or an extension of the exclusive adaptation right of the copyright holder to such innovative uses. ⁵⁸ A middle category, i.e. a copyright *internal* provision on possible

⁵⁶ Cf., e.g., R. Rogge (2006), in G. Benkard (Ed.), Patentgesetz, § 24, fn. 22: important technical advance of considerable economic significance even more restrictive than the general public interest; following P. Krusemarck, Die abhängige Schöpfung im Recht des geistigen Eigentums, p. 294. However, this overlooks the relative character of the new two-element test.

⁵⁷ Cf. A.-M. Schieble (2005), Abhängige Genpatente und das Institut der Zwangslizenz, pp. 179 et seq.; in contrast P. Krusemarck, Die abhängige Schöpfung im Recht des geistigen Eigentums, pp. 294 et seq.

⁵⁸ Of course, a similar mechanism exists in patent law with regard to the scope of patents in cases of dependent inventions, where under certain circumstances independent inventive activity can be raised as an objection by the user of an equivalent solution to get out of the scope of the patent claims (at least under German law, see Federal Court of Justice (BGH), GRUR 1994, 597 – Zerlegvorrichtung für Baumstämme [X ZR 16/93, 17 March 1994]). In U.S. law the reverse doctrine of equivalents and the doctrine of blocking patents fulfil a similar function, albeit in a very limited way, cf. M.A. O'Rourke (2000), Toward a Doctrine of Fair Use in Patent Law, 100 Colum. L. Rev. 2000, 1177, 1193 et seq.; K.J. Strandburg (2011), Patent Fair Use 2.0, 1 UC Irvine L. Rev. 2011, 265, 289 et seq. However, the instrument of compulsory licences exists in patent law on top of the construction of the scope of patents and the mentioned existing doctrines to limit the scope of patents with regard to more or less substantial improvements; a similar additional instrument does generally not exist in copyright law yet, cf. for legal possibilities in German copyright law P. Krusemarck, Die abhängige Schöpfung im Recht des geistigen Eigentums, pp. 305 et seq.

compulsory licences for innovative uses, does not exist;⁵⁹ instead (insofar as regards patent law⁶⁰), only general competition law will provide for the possibility to grant compulsory licences under certain strict conditions when the right holder is in a dominant position and the denial to license is deemed abusive.⁶¹

In fact, it might be argued that a compulsory licence provision in copyright law for certain dependent uses, in particular to enhance competition on derivative markets, would at least set indirect incentives for the copyright holders to force them into negotiations in dependency situations. 62 Compared to patent law, this is particularly obvious for those categories of works that are of rather technical or applied character, such as scientific works, industrial designs, news articles, or computer programs and databases. The extremely limited practice with regard to compulsory licences in patent law is not necessarily an argument against the implementation of this instrument for such categories of works in copyright law. This is because the institutional framework, particularly in Continental European and partly Asian copyright law, with established collective rights management organisations, might provide for a more effective application (or at least indirect psychological effect) of instruments, such as compulsory or statutory licences in copyright law. Accordingly, for news articles, scientific works, industrial designs, computer programs, and databases, the recent academic proposal for a European Copyright Code by the WITTEM group⁶³ provides for a compulsory licence for uses of such works that are indispensable to compete on a derivative market if the right holder has refused to license the use on reasonable terms and the use does not unreasonably prejudice the legitimate interests of the right holder.⁶⁴

⁵⁹ Cf. also M.A. O'Rourke (2000), Toward a Doctrine of Fair Use in Patent Law, 100 Colum. L. Rev. 2000, 1177, 1190, on the historical character of copyright fair use as an all-or-nothing defence as well as on proposals to further develop the doctrine towards a remedy allowing certain uses to proceed for a fee.

⁶⁰General competition law applies with regard to abusive refusals to license by dominant undertakings notwithstanding the additional specific patent law provisions on compulsory licences; cf. P. Maume (2015), Compulsory Licensing in Germany, in R.M. Hilty & K.-Ch. Liu (Eds.), Compulsory Licensing – Practical Experiences and Ways Forward, p. 95; M. Lamping (2015), Refusal to Licence as an Abuse of Market Dominance: From Commercial Solvents to Microsoft, in R.M. Hilty & K.-Ch. Liu (Eds.), Compulsory Licensing – Practical Experiences and Ways Forward, p. 121; cf. also fn. 32 above.

⁶¹ Cf. fn. 32 above on the necessarily limited role of competition law in the field.

⁶² Cf., as an example in a more general sense, the specific compulsory licences for cable retransmission in the German copyright act that gave rise to a recent judgment of the Federal Court of Justice. According to this judgment, the service providers of Online-VCRs may have a right to a compulsory licence with regard to the cable retransmission right of the broadcasting organisations; cf. Federal Court of Justice (BGH), ZUM-RD 2013, 314 (I ZR 151/11, 11 April 2013). This clearly shows the direct potential of compulsory licences to enable the opening of new markets in copyright law.

⁶³ See the Proposal for a European Copyright Code by the WITTEM Group (WITTEM Proposal for a European Copyright Code).

⁶⁴ See Article 5.4(2) WITTEM Proposal for a European Copyright Code.

6 Conclusion

To sum up, this chapter argues that Article 31(1) TRIPS should be interpreted in a relative and flexible manner. Both cumulative elements, i.e. the important technical advance and the considerable economic significance, should be assessed in concrete relation to the invention claimed in the first patent.

As for the element of important technical advance, this results in a relative assessment of the specific technical advance, involved in the second invention, by reference to the underlying technical advance brought about by the first invention. In particular, no predominant or imminent public interest in the dependent use or improvement should be required. In fact, this would significantly lower the threshold of important technical advance in cases where the first patent involves only a small inventive step or where the second patent substantially helps to activate the full innovation potential of the first invention by working it concretely through applications or improvements. This proposal might be particularly helpful with regard to the dependency problem concerning genetic patents because typically the identification of a new function of a DNA sequence will have to be considered an important technical advance compared to the invention underlying the substance patent on the sequence as such.

The element of considerable economic significance, if assessed in relation to the first patent, requires a concrete economic analysis of the potential gain through use of the second patent compared to the potential harm through the limitation of the licence market or value of the first patent. Again, the yardstick should be a purely relative economic analysis of the concrete markets in question. No particularly important (absolute) economic significance should be required. This is because specifically in dependency situations, the mere economic interest of the holder of the first patent in an adequate share of the profits through the use of the second patent can be fully considered in the framework of setting the adequate remuneration according to Article 31(h) TRIPS.

References

Correa, C. (2007), Trade Related Aspects of Intellectual Property Rights: A Commentary on the TRIPS Agreement, Oxford: Oxford University Press

Correa, C. & Yusuf, A. (1998), Intellectual Property and International Trade: The TRIPS Agreement, London: Wolters Kluwer

de Larena, L.R. (2005), What Copyright Teaches Patent Law About "Fair Use" and Why Universities Are Ignoring the Lesson, 84 Or. L. Rev. 2005, 779, Eugene: University of Oregon

⁶⁵ Cf. also H. Ullrich (2015), Mandatory Licensing under Patent Law and Competition Law: Different Concerns, Complementary Roles, in R.M. Hilty & K.-Ch. Liu (Eds.), Compulsory Licensing – Practical Experiences and Ways Forward, pp. 333, 340 et seq.

⁶⁶ A.-M. Schieble (2005), Abhängige Genpatente und das Institut der Zwangslizenz, p. 180.

- Eikermann, A. (2009), in P.-T. Stoll, J. Busche & K. Arend (Eds.), WTO Trade-Related Aspects of Intellectual Property Rights, Article 31, Leiden: Martinus Nijhoff
- Freeburg, R.E. (2005), No Safe Harbor and No Experimental Use: Is it Time for Compulsory Licensing of Biotech Tools?, 53 Buff. L. Rev. 2005, 351, Buffalo, NY: University at Buffalo Law School
- Gruss, D. (2010), Patentrechtliche Abhängigkeit und funktionsgebundener Stoffschutz bei biotechnologischen Erfindungen, Munich: Herbert Utz Verlag
- Hoehne, F. (2013), in J. Busche, P.-T. Stoll & A. Wiebe (Eds.), TRIPS, Internationales und europäisches Recht des geistigen Eigentums Kommentar, Article 31, Cologne: Carl Heymanns Verlag
- Hoffman, D.C. (2004), A Modest Proposal: Toward Improved Access to Biotechnology Research Tools by Implementing a Broad Experimental Use Exception, 89 Cornell L. Rev. 2004, 993, Ithaca, NY: Cornell Law School
- Huys, I., Van Overwalle, G. & Matthijs, G. (2011), Gene and genetic diagnostic method patent claims: A comparison under current European and US patent law, 19 Eur. J. Human Genetics 2011, 1104, London: Nature Publishing Group
- Huys, I., Matthijs, G. & Van Overwalle, G. (2012), The fate and future of patents on human genes and genetic diagnostic methods, 13 Nat. Rev. Genet. 2012, 441, London: Nature Publishing Group
- Kern, M. (1996), Recent Federal Supreme Court decisions on Experimental Use and Compulsory Licensing, CASRIP Newsletter – Summer 1996, available at: http://www.law.washington. edu/Casrip/Newsletter/default.aspx?year=1996&article=newsv3i2eu (accessed on 5 August 2015)
- Koikkara, S.E. (2010), Der Patentschutz und das Institut der Zwangslizenz in der Europäischen Union, Tübingen: Mohr Siebeck
- Krusemarck, P. (2013), Die abhängige Schöpfung im Recht des geistigen Eigentums Das abhängige Patent und die Werkbearbeitung im Vergleich, Tübingen: Mohr Siebeck
- Lamping, M. (2015), Refusal to Licence as an Abuse of Market Dominance: From Commercial Solvents to Microsoft, in R.M. Hilty & K.-Ch. Liu (Eds.), Compulsory Licensing Practical Experiences and Ways Forward, pp. 121–145, Berlin: Springer-Verlag
- Leistner, M. (2005), Intellectual Property and Competition Law: The European Development from Magill to IMS Health compared to recent German and US Case Law, 3 ZWeR 2005, 138, Cologne: RWS Verlag
- Leitzen, M. & Kleinevoss, T. (2005), Renaissance der patentrechtlichen Zwangslizenz? Die Neuregelung des § 24 Abs. 2 PatG, 96 MdP 2005, 198, Alphen aan den Rijn: Wolters Kluwer
- Liu, K.-Ch. (2012), The Need and Justification for a General Competition-Oriented Compulsory Licensing Regime, 43 IIC 2012, 679, Munich/Berlin: C.H. Beck/Springer
- Maume, P. (2015), Compulsory Licensing in Germany, in R.M. Hilty & K.-Ch. Liu (Eds.),
 Compulsory Licensing Practical Experiences and Ways Forward, pp. 95–120, Berlin:
 Springer-Verlag
- O'Rourke, M.A. (2000), Toward a Doctrine of Fair Use in Patent Law, 100 Colum. L. Rev. 2000, 1177, New York: Columbia University School of Law
- Pohl, C. (2000), Die Voraussetzungen der patentrechtlichen Zwangslizenz Eine Untersuchung unter besonderer Berücksichtigung ihrer europarechtlichen Vorgaben, der Pariser Verbandsübereinkunft und des TRIPS-Abkommens, Frankfurt a.M.: Peter Lang
- Reichman, J.H. & Hasenzahl, C. (2003), Non-voluntary Licensing of Patented Inventions: Historical Perspective, Legal Framework under TRIPS, and an Overview of the Practice in Canada and the USA, UNCTAD-ICTSD Project on IPRs and Sustainable Development Issue Paper No. 5 of June 2003, available at: http://www.ictsd.org/downloads/2008/06/cs_reichman_hasenzahl.pdf (accessed on 5 August 2015)
- Rogge, R. (2006), in G. Benkard (Ed.), Patentgesetz, § 24, Munich: C.H. Beck
- Schieble, A.-M. (2005), Abhängige Genpatente und das Institut der Zwangslizenz, Baden-Baden: Nomos

- Strandburg, K.J. (2011), Patent Fair Use 2.0, 1 UC Irvine L. Rev. 2011, 265, Irvine: University of California
- Straus, J. (1996), Implications of the TRIPs Agreement in the Field of Patent Law, in F.-K. Beier & G. Schricker (Eds.), From GATT to TRIPs The Agreement on Trade-Related Aspects of Intellectual Property Rights, pp. 160–215, Weinheim: VCH
- Straus, J. (1998), Abhängigkeit bei Patenten auf genetische Information ein Sonderfall?, GRUR 1998, 314. Munich: C.H. Beck
- Ullrich, H. (2015), Mandatory Licensing under Patent Law and Competition Law: Different Concerns, Complementary Roles, in R.M. Hilty & K.-Ch. Liu (Eds.), Compulsory Licensing Practical Experiences and Ways Forward, pp. 333–375, Berlin: Springer-Verlag
- Van Overwalle, G. (2010), Turning Patent Swords into Shares, 330 Science 2010, 1630, Washington D.C.: AAAS
- Van Overwalle, G. (2015), Fair Use: A Workable Concept in European Patent Law?, in R.M. Hilty
 & K.-Ch. Liu (Eds.), Compulsory Licensing Practical Experiences and Ways Forward,
 pp. 421–435, Berlin: Springer-Verlag
- Van Zimmeren, E. & Van Overwalle, G. (2011), A Paper Tiger? Compulsory License Regimes for Public Health in Europe, 42 IIC 2011, 4, Munich/Berlin: C.H. Beck/Springer
- Wegmann, K. (2013), Der Rechtsgedanke der freien Benutzung des § 24 UrhG und die verwandten Schutzrechte, Baden-Baden: Nomos
- Wolff, C. (2005), Zwangslizenzen im Immaterialgüterrecht, Göttingen: V&R unipress

Part VI From Enforcing to Enhancing TRIPS

The WTO/TRIPS Dispute Settlement Mechanism: Experiences and Perspectives

Silke von Lewinski

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Abstract In 1994, the WTO dispute settlement mechanism was amended so as to become more efficient and law-based. This was widely considered as a clear improvement on the earlier system. For the first time, this mechanism was also extended to intellectual property rights; this fact was also considered as an important point of progress when compared to the previous system in international intellectual property law. This contribution examines different aspects of the use of the dispute settlement mechanism in intellectual property fields and tries to make an assessment of the expectations held at the time. It then shows the systemic limits and weaknesses of this system, in particular regarding the example of the WTO panel procedure DS160 (on Section 110(5) of the US Copyright Act). Moreover, it analyses a particular problem, namely retaliation by suspension of intellectual property protection, before drawing conclusions on this topic.

Prof. Dr. Silke von Lewinski is Tenure at the Max Planck Institute for Innovation and Competition.

S. von Lewinski (⊠)

Max Planck Institute for Innovation and Competition, Munich, Germany e-mail: svl@ip.mpg.de

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1 The WTO/TRIPS Dispute Settlement Mechanism Against the Background of the Preceding Situation

The application of the WTO dispute settlement mechanism to intellectual property rights is certainly one of the three major achievements brought about by the TRIPS Agreement in 1994. The other two achievements were a long and detailed set of provisions on the enforcement of intellectual property rights and the introduction of standards of protection in broad parts of the world, due to the fact that the TRIPS Agreement is a part of the Agreement on the World Trade Organisation (WTO). Why has the availability of the TRIPS dispute settlement mechanism been considered to be so important? Dispute settlement systems as such are not at all uncommon in public international law. They are rather a regular part of international treaties.

In particular, the important intellectual property rights treaties prior to the TRIPS Agreement—in particular, the Berne Convention, the Paris Convention, the Universal Copyright Convention, and the Rome Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organisations—do contain provisions on the settlement of disputes, namely, practically identical references to the proceedings before the International Court of Justice (ICJ). These references in principle mean a prior binding recognition of the compulsory jurisdiction of the ICJ. According to these provisions, the requirement for initiating an action before the ICJ is the existence of a dispute between two or more Member States or Contracting States concerning the construction or application of the treaty in question, an unsuccessful attempt to settle the dispute by negotiations, and the absence of any agreement to the contrary. The post-TRIPS treaties of WIPO no longer contain any such references or any other provision on dispute settlement. Still, the way to the ICJ is also open for those treaties, at least in principle.

In general, the Statute of the ICJ requires that the parties in dispute consent to recognise the Court's jurisdiction. Even for the parties to the Statute of the ICJ, this declaration of recognition is optional and can be issued with respect to all or only certain types of the disputes specified in the Statute's Article 36(2); furthermore, it can be made *ad hoc*, *post hoc*, or even *ante hoc*. A prior binding recognition of the compulsory jurisdiction of the ICJ under Article 36(2) is made by ratifying those agreements that contain a reference to the ICJ.³ However, this does not apply to countries that have ratified with reservations under Article 33(2) of the Berne Convention and Article 28(2) of the Paris Convention.

Despite these possibilities of recourse to the ICJ for dispute settlement, use has never been made thereof. At the same time, the texts of those treaties and their

¹ See Article 33 Berne Convention, Article 28 Paris Convention, Article 15 Universal Copyright Convention, and Article 30 Rome Convention.

² See also below (next paragraph).

³ See in particular H.J. Schlochauer (1987), International Court of Justice, in R. Bernhardt (Ed.), Encyclopedia of Public International Law, Vol. 1, pp. 72 et seq., 77, 79 et seq., on the compulsory jurisdiction of the ICJ and on the declaration of acceptance of the ICJ's jurisdiction.

application certainly have given rise to a number of issues requiring clarification due to continuing technical developments or the increasing economic importance of intellectual property rights. One might try to explain this restraint by a general reluctance on the part of countries to take international disputes to formal court proceedings to the ICJ; the risk of thereby affecting otherwise generally good political relationships with the relevant countries in exchange for resolving a dispute in the very specific field of intellectual property rights may have been considered to be too high. In addition, by such restraint the countries may have expressed their dissatisfaction with certain deficiencies of the ICJ proceedings. For example, the proceedings neither include a possibility of appeal against the decisions, nor any possibility of sanctions.

It is noteworthy to recall the fact that a separate treaty on the settlement of disputes in respect of all treaties administered by WIPO had been discussed in a WIPO Committee of Experts from 1990 to 1995 on the possible provisions of an international treaty on dispute settlement, which resulted in the Draft Treaty on the Settlement of Disputes between States in the Field of Intellectual Property and the Draft Regulations under the Treaty. However, after the USA stated that a Diplomatic Conference regarding the proposed treaty was unnecessary and that its participation in the discussion would "in no way" mean that the USA would adhere to such treaty, it was no longer pursued, even though all other delegations that expressed their views agreed on the need for the proposed treaty. Accordingly, the WTO/TRIPS dispute settlement mechanism remains the most important, since most efficient, mechanism in respect of multilateral IP treaties.

2 Advantages of the WTO/TRIPS Dispute Settlement Mechanism as Perceived in 1994

The importance and advantages of the WTO dispute settlement mechanism for the field of intellectual property were seen, among others, in its answer to the above-mentioned deficiencies: The long standing acceptance and wide use of the dispute settlement mechanism under the former GATT, which then was introduced into the WTO including the TRIPS Agreement, showed that countries did not consider the initiation of such procedures as a risk for their relationships with the other countries.

⁴ See Industrial Property and Copyright 1995, 168 et seq. and 205 et seq., and S. von Lewinski (2008), International Copyright Law and Policy, Ch. 16.

⁵ See WIPO, Commitee on Experts on the Settlement of Intellectual Property Disputes between States, Seventh Session, SD/ECVII/8, para. 25. The WTO Agreement including its Dispute Settlement Understanding, which would also apply to the TRIPS Agreement, then was about to be adopted at that time.

⁶ Ibid., paras. 1–24 and 26–42.

⁷ See also S. von Lewinski (2008), International Copyright Law and Policy, paras. 10.114 et seq.

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In addition, the prospect was for industrialised country Members of WTO to be able to submit, in addition to violation complaints, also non-violation and situation complaints, although to date these are not applicable.⁸

The WTO dispute settlement mechanism also provided for the possibility of an appeal against the panel report and, in particular, for the application of sanctions — even sanctions that could considerably hurt the economy of the other country and thus be effective. The idea was that the sanctions did not need to be applied in the same field as that of the dispute, but could be employed in any other sector of the country's economy covered by the WTO Agreement—a sector in which the sanctions could affect an economy and therefore be a powerful tool to make the country comply with the WTO provision. The belief that the WTO/TRIPS dispute settlement mechanism would be strong and efficient was reflected, among others, in the insistence by the USA on the exclusion of moral rights from the WTO/TRIPS dispute settlement procedure (Article 9(1), sentence 2 TRIPS Agreement)—although the USA was already bound by the obligation to provide for moral rights under the Berne Convention. However, the lack of proper implementation of moral rights in US law was not an obstacle for the USA to become a Berne Union Member, since the Berne Convention did not have an efficient dispute settlement mechanism. ¹⁰

3 Experiences with the WTO/TRIPS Dispute Settlement Mechanism

This section focusses on selected issues of the WTO/TRIPS dispute settlement mechanism with a view to determine whether the expectations at the time of its adoption have been met. It deals with the questions of what categories of countries have made use of the mechanism, how frequently and in which way, and in what respects the system has been successful or less successful in guaranteeing compliance with TRIPS provisions. Another particular issue that raises doubts and is dealt with in this section is that of cross-retaliation through the suspension of obligations under the TRIPS Agreement. It would go beyond the scope of this article to evaluate all aspects of the WTO dispute prevention and settlement mechanisms.

⁸ The discussion of this issue goes beyond the scope of this article; on non-violation complaints in the field of TRIPS, see, e.g., http://www.wto.org/english/tratop_e/trips_e/nonviolation_e.htm; S. Frankel (2009), Challenging TRIPS-Plus Agreements: The Potential Utility of Non-Violation Disputes, 12 J. Int'l Econ. L. 2009, 1023; G.E. Evans (2000), A Preliminary Excursion into TRIPS and Non-Violation Complaints, 3 J. W. Intell. Prop. 2000, 867.

⁹ For an overview of the procedure and the sanctions, see S. von Lewinski (2008), International Copyright Law and Policy, paras. 10.120 et seq., 10.124 et seq.; see also A. Taubman, H. Wager & J. Watal (2014), A Handbook on the WTO TRIPS Agreement, pp. 161 – 165.

¹⁰ For more detail, see S. von Lewinski (2008), International Copyright Law and Policy, paras. 10.52 – 10.54.

or even to analyse the panel and appellate body reports rendered in the field of the TRIPS Agreement.

3.1 Use Made of the Dispute Settlement Mechanism and Results Obtained

It may be of interest to assess the extent to which the TRIPS dispute settlement procedures have been made use of in the field of intellectual property rights, as well as the parties to TRIPS disputes (by distinguishing between industrialised countries and developing countries). As of mid-December 2014, consultations relating to the TRIPS Agreement have been requested for 34 cases, as compared to 486 cases relating to any WTO Agreement, which represents about 7 % of the overall number of WTO cases. In ten of the TRIPS cases, panel reports or, if appealed, Appellate Body reports have been adopted. In the other cases, parties have settled or otherwise terminated the cases, or consultations are still pending. 11

In the first 5 years, from 1996 until 2000, the USA used the TRIPS dispute settlement mechanism most actively, having been a claimant in 16 cases, against six cases initiated by the EC (now EU) and one by Canada. On the respondent's side, the EC (now EU) or one of its Member States appear most often during this period, namely in nine cases, against the USA in three cases, other industrialised countries (Japan and Canada) in four cases (and thus industrialised countries altogether in 16 cases) and developing countries in seven cases. This picture may be due to different levels of stringency of countries in pursuing their own economic interests in other countries, or also due to different cultures of conducting relationships with other countries. In respect of developing countries, the initially low participation as a claimant may reflect unequal conditions in terms of financing and education. ¹²

Still, after 2000, the situation has been reversed: developing countries have been involved as claimants more frequently than industrialised countries, and industrialised countries were more often respondents than developing countries (though often in relation to the same matters). From 2001 until 2014, the USA, the EU (ex EC), and Australia have been a complainant only in one case each, while developing countries have been complainants in eight cases. In contrast, the USA

¹¹ See http://www.wto.org/english/tratop_e/dispu_e/dispu_agreements_index_e.htm?id=A26.

¹² For an exploration of explanations for the limited use of the WTO proceedings overall by Asian countries, see M. Ewing-Chow, A.W.S. Goh & A.K. Patil (2013), Are Asian WTO Members Using the WTO 'Effectively'?, 16 J. Int'l Econ. L. 2013, 669. See also K.M.W. Mitchell (2013), Developing Country Success in WTO Disputes, 47 J.W.T. 2013, 77. For references to several explanations by scholars, see also A. Bakardjieva Engelbrekt (2011), The WTO Dispute Settlement System and the Evolution of International IP Law: An Institutional Perspective, in A. Kur & M. Levin (Eds.), Intellectual Property Rights in a Fair World Trade System, pp. 139 – 141.

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has been a respondent in one case, the EU (ex EC) (and a Member State) in three cases, and Australia in five cases (and thus industrialised countries were respondents in nine cases), while developing countries (China) were so only in two cases. It would be a matter of speculation to seek explanations of this development; in any case, it shows that the WTO dispute settlement system has more recently been actively used primarily by developing countries as complainants against industrialised countries, and not, as initially presumed by some, mainly by industrialised countries against developing countries. In addition, developing countries have quite actively made use of the possibility of participating as third parties in TRIPS disputes. If

It is also noteworthy that overall, less cases were brought to dispute settlement than were expected by some commentators, and one may note a trend towards a decline in the number of cases brought under the dispute settlement system per year. Furthermore, most cases did not focus on substantive intellectual property law questions, but on other issues, such as trade discrimination or application in time. Moreover, for the most part, individual businesses were not behind the disputes, but Members aiming at reaching general compliance of the respondents' laws with TRIPS obligations. As to the results obtained through dispute settlement, one may conclude that panel decisions overall have been balanced rather than, as expected by some commentators, one-sidedly in favour of intellectual property protection.

 $^{^{13}}$ J. Pauwelyn (2010), The Dog that Barked but Didn't Bite: 15 Years of Intellectual Property Disputes at the WTO, pp. 4-5=1 J. Int'l Dispute Settlement 2010, 389; A. Bakardjieva Engelbrekt (2011), The WTO Dispute Settlement System and the Evolution of International IP Law: an Institutional Perspective, in A. Kur & M. Levin (Eds.), Intellectual Property Rights in a Fair World Trade System, p. 139, referring to R.C. Dreyfuss & A. Lowenfeld (1997), Two Achievements of the Uruguay Round: Putting TRIPS and Dispute Settlement together, 37 Va. J. Int'l L. 1997, 275.

¹⁴ A. Bakardjieva Engelbrekt (2011), The WTO Dispute Settlement System and the Evolution of International IP Law: an Institutional Perspective, in A. Kur & M. Levin (Eds.), Intellectual Property Rights in a Fair World Trade System, pp. 139 – 140.

¹⁵ See J. Pauwelyn (2010), The Dog that Barked but Didn't Bite: 15 Years of Intellectual Property Disputes at the WTO, pp. 5 – 9, with further details.

¹⁶ Ibid., pp. 10–13.

¹⁷ Ibid., pp. 13–15.

¹⁸ Ibid., pp. 15 et seq. with further references. For example, in the 'US — Section 110(5) Copyright Act'-case analyzed below, the 'homestyle' exception was held to be in compliance with TRIPs, although even some US commentators had previously considered that exception as violating TRIPS, e.g., L. McCluggage (2000), Section 110(5) and The Fairness in Music Licensing Act: Will the WTO Decide the United States Must Pay to Play?, 40 IDEA 2000, 20.

3.2 Limits and Weaknesses of the Dispute Settlement Mechanism as Regards Implementation of WTO Rulings

The dispute settlement mechanism has shown, in its application, certain limits and weaknesses. They are illustrated by using the example of the case on the amended Section 110(5) of the US Copyright Act on Music Licensing, WTO/DS/160. 19 The question was whether certain exceptions to the public performance right under US law (called communication to the public right under international law) complied with the relevant provisions of the TRIPS Agreement. In brief, the amended Section 110(5)A of the US Copyright Act included the so-called homestyle exemption, under which small restaurants and retailers using equipment normally used in private homes as further specified in the law are allowed to communicate music broadcasts by loudspeaker to their guests or clients without asking for the authors' or other right holders' authorization and without payment of a remuneration to them. Under Section 110(5)B of the US Copyright Act (the so-called business exemption), larger restaurants and the like businesses as well as larger retailers, i.e. up to a size of the location of 348 and 186 m², respectively, are allowed to communicate music broadcasts by loudspeaker to their guests or clients without asking for the authors' or other right holders' authorization and without payment of a remuneration to them; under certain conditions relating to the equipment, businesses even larger than those mentioned were allowed to do the same.

Under the Berne Convention, the substantive rules of which must be complied with under the TRIPS Agreement (Article 9(1), sentence 1 TRIPS Agreement), the relevant exclusive communication rights under Articles 11(1)(ii) and 11^{bis}(1)(iii) must be provided; they may only be made subject to exceptions and limitations under the conditions of the Berne Convention. Article 13 TRIPS Agreement in addition requires that such national law exceptions or limitations comply with the so-called three-step test (three conditions to be met in order to comply with the TRIPS Agreement). The competent WTO Panel declared the so-called business exemption to be in violation of the TRIPS Agreement.²⁰ The obligation of the USA to bring its law into conformity with the TRIPS Agreement within the indicated period of time (12 months) was not fulfilled, not even after an agreed prolongation of that time by half a year.

Thereafter, the USA and the EC (now EU) agreed to proceed to arbitration and to accept the arbitral award as final regarding the nullification or impairment of benefits suffered by the EC (now EU) due to the violation of the TRIPS obligation. However, the views on how to calculate these losses differed strongly between the USA and the EC (now EU).²¹ Finally, the arbitrators decided on a determination of

¹⁹ European Communities v. United States, 'US — Section 110(5) Copyright Act', WT/DS160.

²⁰ Panel Report, United States – Section 110(5) of the US Copyright Act, WT/DS160/R, adopted 27 July 2000, DSR 2000:VIII, p. 3769.

²¹ The EC (now EU) calculated on the basis of the potential licensing income (US \$ 25,486,974), while the US chose the factual outcome of the preceding three years as a basis (between US \$

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the amount that was around 10 % of what the EC (now EU) had claimed and calculated; they fixed this amount at 1,219,900 euros per year. The EC (now EU) then requested authorization to retaliate in a certain manner, namely by suspending concessions under the TRIPS Agreement through levying a special fee from US nationals in connection with border measures concerning copyright goods up to the level of nullification and impairment resulting from the TRIPS violation. However, this met with the objection of the USA. When the matter then was referred by the Dispute Settlement Body (DSB) to arbitration under Article 22.6 DSU, both parties requested suspension of ongoing work thereon. 24

Since then, according to the requirement under Article 21.6 DSU, the USA has regularly reported about the status of implementation of the Panel Report. Although the US government has often stated to be engaged with Congress and with the EU (ex EC) in order to find a solution that would comply with the TRIPS Agreement and be acceptable to both parties, ²⁵ no progress has been made to date. In particular, after more than 13 years, there is no indication that the USA will bring its rules under its Copyright Act into compliance with the TRIPS Agreement. This situation may be explained by strong lobbying activities against such an amendment by restaurant owners and other businesses that would have to pay licenses for the music they are playing in their premises. ²⁶

In general, even if a Member that has violated a TRIPS provision pays compensation to the injured Member after both have agreed on the amount to be paid, ²⁷ the agreed amount of payment may have to be allocated from public money on the basis of a legislative decision and therefore may meet the same obstacles as the amendment of the violating law itself. Where recourse is had to arbitration on the level of suspension of concessions under Article 25 of the DSU, the award of the arbitrators (which must be abided by without recourse to appeal) may raise major concerns in respect of its contents; in particular, it may adversely affect the minimum standard of protection under the TRIPS Agreement. ²⁸

 $^{446,\!000}$ and US \$ 733,000), see also S. von Lewinski (2008), International Copyright Law and Policy, para. 10.130.

²² Award of the Arbitrators, United States – Section 110(5) of the US Copyright Act – Recourse to Arbitration under Article 25 of the DSU, WT/DS160/ARB25/1, 9 November 2001, DSR 2001: II, p. 667.

²³ WT/DS160/19.

²⁴ WT/DS160/22.

²⁵ See also J. Pauwelyn (2010), The Dog that Barked but Didn't Bite: 15 Years of Intellectual Property Disputes at the WTO, pp. 38–39.

²⁶ This situation was also explained at the time by the influence of a particular Senator in the US Senate, see S. von Lewinski (2008), International Copyright Law and Policy, para. 10.131/fn 298.

²⁷ See Article 22.1 Dispute Settlement Understanding (DSU); if they do not agree, they may also have recourse to binding arbitration on the amount to be paid, see Article 25.2 DSU.

 $^{^{28}}$ See R. Owens (2003), TRIPS and the Fairness in Music Arbitration: The Repercussions, 52 E.I. P.R 2003, 49, 52 et seq.

And even if the parties do not agree on compensation or arbitration and the WTO Dispute Settlement Body authorises upon request the suspension of the application of concessions by the injured Member while the violation of international law continues, the credibility of the entire dispute settlement system and, possibly, the willingness of other countries to comply with the substantive law may be affected. Where a country seems to consider an international dispute settlement system mainly as a tool to make other parties to a treaty amend their laws in order to comply with the treaty while not being able or willing fully to submit to the system and all its consequences when it happens to be a defendant, it may damage the system itself.

Given these considerations, one has to wonder what the value of a dispute settlement system is, if the Panel Report is not complied with and thus violations of the TRIPS Agreement continue, while losses are not compensated as it would seem adequate, or even if they are being compensated.

3.3 Advantages of the WTO Dispute Prevention and Settlement System

Despite the criticism expressed in the previous subsection, a number of positive aspects of the dispute settlement mechanisms have to be highlighted, too. In particular, for a complete assessment of these mechanisms, one also has to look at the dispute prevention system of the WTO, which likewise applies to the TRIPS Agreement. In particular, the mandatory review of national legislation that implements the TRIPS obligations has in fact played a major role in clarifying issues involving the proper implementation of TRIPS obligations among Member States at an early stage, and continues to do so. According to Article 68 sentence 1 TRIPS Agreement, the Council for TRIPS in particular has the task of monitoring the compliance of Member States with respect of their TRIPS obligations. For this purpose, it serves as a forum in which the national legislation implementing TRIPS obligations by any Member may be questioned by any other Member.

In fact, the TRIPS Council began in June 1996 to review notified legislation, first of industrialized countries and later, after the transitional period of Article 65 (2) TRIPS Agreement had elapsed, also of developing countries. Members thus had the possibility to study in depth the implementing legislation of other Members and to query those Members where they had doubts regarding the compliance of such legislation with the TRIPS Agreement.²⁹ This institutionalized, systematic

²⁹ On this function and working of the TRIPS Council, see, e.g. K. Kaiser (2009), in P.-T. Stoll, J. Busche & K. Arend (Eds.), WTO – Trade-Related Aspects of Intellectual Property Rights, Article 68 nos. 5–7; see also D. Gervais (2012), The TRIPS Agreement – Drafting History and Analysis, Article 68 No. 2.751, with further references; see also A. Taubman, H. Wager & J. Watal (2014), A Handbook on the WTO TRIPS Agreement, pp. 156–157.

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review of implementing legislation among all Members promotes mutual understanding of each other's national provisions as well as discussion of potentially diverging ways of interpretation of a TRIPS provision.

The reviews of notified legislation are based on written questions by Members and replies by the Member of which the implementing legislation is at stake. The reviews are carried out before the actual meeting of Members takes place. During the meeting, additional questions and answers are exchanged. Even at subsequent meetings, Members may discuss those issues for which they see a further need for clarification. Finally, the introductory statements by Member delegations as well as questions and answers from the review meetings are circulated in the IP/Q series of documents of the WTO and are generally made available to the public on the WTO website 6 months after they first have been confidentially circulated.³⁰

Both this review mechanism, including consultations among Members as regards the interpretation of TRIPS provisions, and consultations directly convened by the Director General of the WTO on particular issues regarding the implementation of TRIPS provisions,³¹ have the aims of finding differences in the positions among Members, resolving them where possible, and thus avoiding the need to have recourse to the formal dispute settlement mechanism.³² In fact, it seems that most issues regarding the compliance of a Member's law with the TRIPS provisions are successfully tackled by dispute prevention mechanisms, which thus efficiently contribute to the compliance of TRIPS Members with the TRIPS Agreement.³³ Furthermore, even where Members have recourse to the formal dispute settlement mechanism, consultations with the aim of reaching an agreement between the relevant Members in line with the TRIPS provisions are often held in parallel with the formal proceedings and often result in a settlement of the case by a mutually agreed solution or due to the withdrawal of the complaint by the complainant.³⁴ In the remaining cases, dispute settlements mostly fulfil their purpose.

In summary, as compared to intellectual property treaties without such dispute prevention and settlement mechanisms, the WTO mechanisms are clearly more efficient in assuring compliance with the relevant intellectual property provisions, both through the review mechanism including the promotion of ongoing

³⁰ On this procedure, and on the list of developing countries for which the reviews began in 2000, see http://www.wto.org/english/tratop_e/TRIPS_e/intel8_e.htm; at this site, one may also find the links to individual reviews in the TRIPS Council of individual Members and TRIPS areas.

³¹ See A. Taubman, H. Wager & J. Watal (2014), A Handbook on the WTO TRIPS Agreement, p. 30.

³² Ibid., pp. 32, 33.

³³ J. Pauwelyn (2010), The Dog that Barked but Didn't Bite: 15 Years of Intellectual Property Disputes at the WTO, p. 45, also points at the frequent effect of requests for formal consultations, namely, pressure to come to an agreement before a panel needs to be established; he also mentions technical and financial support or "diplomatic push" as alternative, effective ways of avoiding disputes.

³⁴ See, e.g. A. Taubman, H. Wager & J. Watal (2014), A Handbook on the WTO TRIPS Agreement, p. 166.

consultations in the TRIPS Council and beyond, and through the formal dispute settlement system—despite individual examples as the one set out above under heading 2, which does not represent the rule.

Of course, the ongoing non-compliance with TRIPS provisions, as in the above example of the USA, is a consequence of domestic decision-making rules and of the fact that countries are sovereign in respect of their own legislation even in context of international obligations; the WTO or the Dispute Settlement Body cannot replace national law with a view to compliance with the international law. If the members of a parliament or other legislative body are more interested in national economic or other interests, or, in general, in national politics than in the international obligations of this country, no dispute settlement mechanism, be it that of the WTO or any other, would result in the actual compliance with the relevant international law through legislative amendments. These are the limits of any such dispute settlement system that does not involve the renunciation of sovereignty by the parties to a treaty. They are thus systemic rather than WTO-specific and may not be easily remedied. However, it is also true that in most cases, adverse WTO rulings have been implemented. Only the USA so far has not complied with TRIPS obligations years after an adverse WTO ruling was handed down.³⁵

3.4 Retaliation by Suspension of Intellectual Property Protection

In exceptional cases,³⁶ WTO Members may be authorized to retaliate in sectors and under WTO Agreements other than that of the violation; such retaliation is called cross-retaliation (Article 22.3(c) DSU). Such cross-retaliation in the field of intellectual property was authorized for a violation of the GATT 1994 and the GATS in the *Bananas III* case brought by Ecuador against the EC (now EU);³⁷ for the violation of the GATS in the gambling case brought by Antigua and Barbuda against the USA;³⁸ and for a violation of subsidy rules of the SCM Agreement

³⁵ J. Pauwelyn (2010), The Dog that Barked but Didn't Bite: 15 Years of Intellectual Property Disputes at the WTO, p. 41.

³⁶ As a rule, retaliation by suspension of concessions must take place in the same sector as that of the complaint, or, if not practicable or effective, in other sectors under the same Agreement, or, if not practicable or effective, under another covered Agreement, see Article 22.3 DSU, and a short presentation in S. von Lewinski (2008), International Copyright Law and Policy, para. 10.126. On cross-retaliation in the field of intellectual property rights; see also F. Abbott (2009), Cross-Retaliation in TRIPS: Options for Developing Countries, ICTSD Issue Paper No. 8 of April 2009.

³⁷ Panel Report, European Communities – Regime for the Importation, Sale and Distribution of Bananas, Complaint by Ecuador, WT/DS27/R/ECU, adopted 25 September 1997, as modified by Appellate Body Report WT/DS27/AB/R, DSR 1997:III, p. 1085.

³⁸ Appellate Body Report, United States – Measures Affecting the Cross-Border Supply of Gambling and Betting Services, WT/DS285/AB/R, adopted 20 April 2005, DSR 2005;XII, p. 5663

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and the Agreement on Agriculture in the *Upland Cotton* case brought by Brazil against the USA.³⁹

In the *Upland Cotton* case, after Brazil had been authorized by the Dispute Settlement Body to apply cross-retaliation measures according to the decision by the Arbitrator, Brazil enacted a provisional Presidential Executive Order as a basis for suspension of concessions or other obligations under the TRIPS Agreement. ⁴⁰ It envisaged in particular the suspension of intellectual property rights, the limitation of such rights, temporary blocking of the payment of royalties or remuneration in relation to the exercise of rights of intellectual property, and other measures as regards authors' rights and related rights, trademarks, geographical indications, industrial designs, patents, topographies of integrated circuits, the protection of confidential information and as regards Parts III and IV of the TRIPS Agreement. Around 1 month later, the competent Foreign Trade Chamber of Brazil indicated in a preliminary list those patents and other intellectual property rights from the USA to be covered by such sanctions, unless both parties reached a settlement. Ultimately, the parties found a mutually agreed solution to the dispute, so that cross-retaliation on the basis of the TRIPS Agreement was not exercised. ⁴¹

In the *Bananas III* case, Ecuador was authorized by the arbitrators under Article 22.6 DSU to cross-retaliate under the TRIPS Agreement at least to the extent that retaliation under the GATT and the GATS was not sufficient to reach the level of nullification and impairment as determined by the arbitrators (US\$ 201.6 Mio. per year). In particular, Ecuador was authorized to retaliate by not providing protection under Article 14 TRIPS Agreement on the protection of performing artists, producers of phonograms, and broadcasting organizations, as well as protection of geographical indications and industrial designs. The EC (now EU) reacted by an application under Article 22.6 DSU to review the requested sanctions in an arbitration procedure. In their decision, the arbitrators in an *obiter dictum* also discussed the legal and factual problems that arise when a WTO Member suspends an obligation under the TRIPS Agreement.⁴²

⁽Corr.1, DSR 2006:XII, p. 5475). On this case, with further considerations, see, e.g. H. Große Ruse-Khan (2008), A Pirate of the Caribbean? The Attractions of Suspending TRIPs Obligations, 11 J. Int'l Econ. L. 2008, 313.

³⁹ Decision by the Arbitrator, United States – Subsidies on Upland Cotton – Recourse to Arbitration by the United States under Article 22.6 of the DSU and Article 4.11 of the SCM Agreement, WT/DS267/ARB/1, 31 August 2009, DSR 2009:IX, p. 3871.

 $^{^{\}rm 40}$ Medida provisoria No. 482, de 10 de fevereiro de 2010, published in the Federal Official Gazette of 11 February 2010.

⁴¹ For a detailed presentation of this case up to the mutual agreement in form of a Memorandum of Understanding, see J. Straus (2013), Global Intellectual Property and Innovation Landscape in 1990 and Today, in A. Matlak & S. Stanislawska-Kloc (Eds.), Spory o Własność Intelektualną (Ksiega jubileuszowa dedykowana Profesorom Januszowi Barcie i Ryszardowi Markiewiczowi), p. 1135, 1151–1159.

⁴² Decision by the Arbitrators, European Communities – Regime for the Importation, Sale and Distribution of Bananas – Recourse to Arbitration by the European Communities under Article 22.6 of the DSU, WT/DS27/ARB/ECU, 24 March 2000, DSR 2000:V, p. 2237.

Since this case was the first one in which the suspension of TRIPS obligations had been requested and the first one involving Article 22.3(b)-(e) of the DSU, the arbitrators elaborated in detail their views on different aspects of the suspension of TRIPS obligations. 43 They started by recalling the fact that TRIPS obligations are limited to granting treatment to the "nationals" of other Members, to be understood as those who meet the criteria for eligibility for protection under specified treaties, such as the Paris and Berne Conventions (Article 1(3) sentence 2 TRIPS Agreement) or, as regards geographical indications, to "interested parties" referred to in Articles 22(2) and 23(2) TRIPS Agreement. The arbitrators thus clarified that Ecuador could suspend its obligations only in respect of those right holders from the relevant EC (now EU) Member States covered by the suspension request who fulfilled the relevant criteria of eligibility, but that it was not authorized to retaliate against any other right holders covered by the TRIPS Agreement. 44 This fact alone shows that the exercise of cross-retaliation would raise considerable practical problems: In particular, where licenses are granted on a global basis for a lump sum, such as by collecting societies, one would have to find out what proportion of the licensed repertoire would be affected by the suspension of protection and then to reduce the license fee accordingly. In addition, as was pointed out correctly by the arbitrators, one object such as a phonogram incorporates rights of different right holders, in particular the performer, phonogram producer and the author of the works recorded thereon. All of them are subject to separate criteria for eligibility, so that one of the right holders may be subject to cross-retaliation, while others are not. In such a case, suspension of TRIPS obligations must not be applied, because the rights of right holders who are not "nationals" (as defined above) of the relevant Member against which retaliation takes place must not be affected by cross-retaliation. 45 The country applying cross-retaliation in such cases would thus have to examine for each object that contains rights of different right holders whether all of them are "nationals" as defined in the TRIPS Agreement of the respondent.

Furthermore, the arbitrators considered whether a suspension of TRIPS obligations could be in conflict with the non-derogation clause in Article 2(2) TRIPS Agreement, according to which "nothing in Parts I to IV of this Agreement shall derogate from existing obligations that Members have to each other in the Paris Convention, the Berne Convention, the Rome Convention and the Treaty on Intellectual Property in Respect of Integrated Circuits." In fact, the question here is whether the suspension of TRIPS obligations, which would at the same time result in the violation of obligations that WTO Members have between each other on the basis of one of the other agreements, such as the Berne Convention, is permitted. In particular, the suspension, for example, of the rights of reproduction and broadcasting under Articles 9(1) and 11^{bis}(1) Berne Convention—and thus of two rights that also have to be granted on the basis of Article 9(1) TRIPS

⁴³ Ibid., paras. 139–165.

⁴⁴ Ibid., paras. 140–147.

⁴⁵ Ibid., para, 144.

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Agreement, which refers to the substantive Articles of the Berne Convention to be complied with by WTO Members—automatically results in the non-compliance with the relevant obligations under the Berne Convention. The arbitrators argue that the non-derogation clause in Article 2(2) TRIPS Agreement only applies to Parts I to IV TRIPS Agreement, but not to Part V on dispute prevention and settlement, which makes applicable the provisions of the Dispute Settlement Understanding to the TRIPS Agreement. It seems that the arbitrators thereby implicitly rely on the *e contrario* argument according to which Part V TRIPS Agreement may derogate from existing obligations of WTO Members under the mentioned treaties.⁴⁶

However, the arbitrators admitted themselves that they only had jurisdiction to make judgments on the basis of the relevant WTO law. They left it explicitly open whether the suspension of TRIPS obligations, even if authorized by the Dispute Settlement Body, by Ecuador would violate the Berne Convention and other agreements not covered by the WTO.⁴⁷ In fact, it is quite doubtful whether, for example, Berne Union Members by joining the WTO could derogate from their obligations under the Berne Convention, given the fact that the TRIPS Agreement is a special agreement within the meaning of Article 20 Berne Convention, which by definition must not provide for lesser protection than the Berne Convention. If certain Berne rights, such as the right of reproduction or of broadcasting, are no longer granted because they are being suspended due to a cross-retaliation under the TRIPS Agreement, such TRIPS provision would result in lesser protection. The same applies to the Rome Convention and the Paris Convention.

The example of Article 6^{bis} Berne Convention given by the arbitrators does not change this assessment. According to Article 9(1) sentence 2 TRIPS Agreement, Members shall not have rights or obligations under this Agreement in respect of the rights conferred under Article 6^{bis} Berne Convention. This phrase is still consistent with the non-derogation clause in Article 2(2) TRIPS Agreement because it simply means that no WTO Member can insist on its authors being granted moral rights under the TRIPS Agreement; however, it may do so under the Berne Convention, since the obligation under Article 6^{bis} Berne Convention subsists between WTO Members that are also Berne Union Members. This case is different from the suspension of TRIPS obligations, as shown in the case of the reproduction and broadcasting rights above, where these rights which have to be granted under the Berne Convention, are simply not granted. Such non-compliance with treaties other than the WTO Agreements through suspension of TRIPS obligations thus remains doubtful and would require further analysis.

⁴⁶ Ibid., para. 150; see ibid., para. 151.

⁴⁷ Ibid., para. 152.

⁴⁸ Ibid., para. 149.

⁴⁹ Such analysis goes beyond the scope of this article; see, for example, P.-T. Stoll, J. Busche & K. Arend (2009), WTO – Trade-Related Aspects of Intellectual Property Rights, Article 64 no. 43 with further references.

Worth mentioning is another aspect of suspension of TRIPS obligations, which is also highlighted by the arbitrators in the *Bananas III* case. If a Member such as Ecuador suspends, for example, the reproduction right of phonogram producers so that the phonograms at stake may be reproduced without the consent of the relevant right holder in Ecuador, the other WTO Members remain obliged to respect the TRIPS obligations; in particular, they still would have to apply Article 51 TRIPS Agreement on suspension of release by customs authorities, since such phonograms were not produced with the consent of the right owner. Accordingly, if the phonograms were imported into other WTO Members, they would have to be fully protected in these other WTO Members, even if Ecuador had been authorized to suspend TRIPS obligations in Ecuador. 50

Finally, the arbitrators highlight the fact that in the field of intellectual property, any suspension of TRIPS obligations by a WTO Member has an adverse impact on private rights of natural or legal persons. Such private right owners generally do not have any connection with the behavior of the WTO Member that did not comply with a WTO obligation and the related ruling by the Dispute Settlement Body. Such right owners may only try to receive damages from the WTO Member against which cross-retaliation took place, based on domestic law on state responsibility. The situation may be particularly delicate where the intellectual property right at stake is a fundamental right protected under the constitution, as is frequently the case for authors' and inventors' rights, which may be protected as such or as an aspect of the fundamental right of property.

Further legal difficulties may arise from the domestic law of the WTO Member that desires to suspend TRIPS obligations. In particular, if treaties such as the TRIPS Agreement have a higher rank than domestic legislation and apply directly, a simple law cannot result in the suspension of a TRIPS obligation. Furthermore, the suspension of intellectual property rights that are guaranteed by the constitution of the retaliating country may raise additional problems.⁵² The arbitrators themselves also admitted that several legal problems may arise within the domestic law of the WTO Member that is authorized to suspend TRIPS obligations; however, they clarified that it is a matter for that Member State, in this case Ecuador, to deal with such challenges.⁵³

Overall, this bundle of legal and factual difficulties of suspending TRIPS obligations may have been one reason why in none of the three cases mentioned above, in which such a suspension of TRIPS obligations was authorized, the

⁵⁰ Decision by the Arbitrators, European Communities – Regime for the Importation, Sale and Distribution of Bananas – Recourse to Arbitration by the European Communities under Article 22.6 of the DSU, WT/DS27/ARB/ECU, 24 March 2000, DSR 2000:V, p. 2237, paras. 153–156.

⁵¹ Ibid., para. 157.

⁵² P.-T. Stoll, J. Busche & K. Arend (2009), WTO – Trade-Related Aspects of Intellectual Property Rights, Article 64 no. 42.

⁵³ Decision by the Arbitrators, European Communities – Regime for the Importation, Sale and Distribution of Bananas – Recourse to Arbitration by the European Communities under Article 22.6 of the DSU, WT/DS27/ARB/ECU, 24 March 2000, DSR 2000:V, p. 2237, para. 158.

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relevant WTO Member finally proceeded to the implementation of the authorized suspension⁵⁴ but that the parties found an agreement to settle the dispute beforehand. In fact, as with Brazil in the *Upland Cotton* case, also Ecuador never exercised this right to cross-retaliate under the TRIPS Agreement, since the parties reached an agreement.⁵⁵ The same is understood to have occurred in the *Antigua and Barbuda* case.⁵⁶ Overall, the possibility of any kind of retaliation alone may have the effect that parties prefer to try to find a mutually agreed solution.

4 Evaluation of and Perspectives for the WTO/TRIPS Dispute Settlement Mechanism

On the one hand, the potential for dispute settlement cases under the TRIPS Agreement seems rather high. Upon a closer look, many provisions of the TRIPS Agreement offer some room for interpretation; many questions are not only of an academic nature, but also have a strong economic impact. It may well be that there are many cases in which provisions of the TRIPS Agreement are currently violated by Member Countries—and nobody knows it, or nobody wants to know whether there is a violation. The latter possibility may be true in particular for those provisions of the TRIPS Agreement which have been deliberately drafted ambiguously in order to allow diverging interpretations and not to endanger the major project of the inclusion of intellectual property rights into the then GATT framework.⁵⁷

On the other hand, while for all too long there was not any realistic possibility to find binding answers to questions of interpretation regarding international intellectual property rights, it is now possible for Member Countries of the WTO to have many open issues clarified. In particular, the review mechanism and the encouragement of consultations at any time help to clarify many issues before they might result in a dispute. In addition, also the availability of the WTO dispute settlement mechanism for intellectual property disputes under the TRIPS Agreement in principle represents an important advantage as compared to treaties without a comparable dispute settlement mechanism. At the same time, its potential should not be overestimated. In particular, even if experience has shown that this mechanism is being used, as opposed to the dispute settlement mechanism before the International

⁵⁴ Similarly, J. Pauwelyn (2010), The Dog that Barked but Didn't Bite: 15 Years of Intellectual Property Disputes at the WTO, p. 40.

⁵⁵ See J. Straus (2013), Global Intellectual Property and Innovation Landscape in 1990 and Today, in A. Matlak & S. Stanislawska-Kloc (Eds.), Spory o Własność Intelektualną (Ksiega jubileuszowa dedykowana Profesorom Januszowi Barcie i Ryszardowi Markiewiczowi), p. 1160.
⁵⁶ Ibid., p. 1161.

⁵⁷ On this practice of "constructive ambiguity", see, in the context with the rental right under Article 14(4) TRIPS Agreement, von S. von Lewinski (2008), International Copyright Law and Policy, para. 10.73–10.77.

Court of Justice available under the other intellectual property treaties, a complaint still requires tremendous financial resources, manpower and time and will probably thus only be considered as an option if major economic losses are at stake due to a violation of the TRIPS Agreement.

Consequently, certain questions of interpretation will remain open, and ongoing smaller violations will not be pursued, unless in particular the potential violation results in a significant economic loss. Furthermore, the dispute settlement mechanism has its limits where a WTO Member does not implement the Panel Report, so that the violation continues, and where the compensation or level of nullification and impairment as determined by the arbitrators does not, in the view of the complainant party, reflect the actual losses. In addition, retaliation or trade compensation is not of any benefit to the right holders whose rights were not respected by the non-compliant Member; therefore, there is no incentive to use the TRIPS dispute settlement system to remedy conflicts between individual companies and other parties, but to clarify systemic intellectual property issues. Retaliation by the suspension of concessions under the TRIPS Agreement raises a number of questions and has never been exercised to date.

Finally, one may highlight from the experience with TRIPS disputes that the dispute settlement mechanism has, unlike many commentators presumed, not been mainly used by industrialized countries against developing countries but that more recently, the opposite is true. In particular, it has been exclusively developing countries that have requested suspension of TRIPS obligations in the framework of cross-retaliation. Moreover, it should be stressed that TRIPS dispute settlement rulings did not result primarily in rulings in favor of right holders, and that Members in most cases have complied with the rulings.

References

Abbott, F. (2009), Cross-Retaliation in TRIPS: Options for Developing Countries, ICTSD Issue Paper No. 8 of April 2009

Bakardjieva Engelbrekt, A. (2011), The WTO Dispute Settlement System and the Evolution of International IP Law: An Institutional Perspective, in A. Kur & M. Levin (Eds.), Intellectual Property Rights in a Fair World Trade System, pp. 139 – 141, Cheltenham: Edward Elgar

Dreyfuss, R. C. & Lowenfeld, A. (1997), Two Achievements of the Uruguay Round: Putting TRIPS and Dispute Settlement together, 37 Va. J. Int'l L. 1997, 275–333, Charlottesville: The Virginia Law Review Association

Evans, G.E. (2000), A Preliminary Excursion into TRIPS and Non-Violation Complaints, 3 J. W. Intell. Prop. 2000, 867, Hoboken: John Wiley & Sons

Ewing-Chow, M., Goh, A.W.S. & Patil, A.K. (2013), Are Asian WTO Members Using the WTO 'Effectively'?, 16 J. Int'l Econ. L. 2013, 669–705, Oxford: Oxford University Press

Frankel, S. (2009), Challenging TRIPS-Plus Agreements: The Potential Utility of Non-Violation Disputes, 12 J. Int'l Econ. L. 2009, 1023–1065, Oxford: Oxford University Press

Gervais, D. (2012), The TRIPS Agreement – Drafting History and Analysis, 4th ed., London: Sweet & Maxwell

Große Ruse-Khan, H. (2008), A Pirate of the Caribbean? The Attractions of Suspending TRIPs Obligations, 11 J. Int'l Econ. L. 2008, 313–364, Oxford: Oxford University Press

Kaiser, K. (2009), in P.-T. Stoll, J. Busche & K. Arend (Eds.), WTO – Trade-Related Aspects of Intellectual Property Rights, Article 68, Leiden: Martinus Nijhoff

- von Lewinski, S. (2008), International Copyright Law and Policy, Oxford: Oxford University Press
- McCluggage, L. (2000), Section 110(5) and The Fairness in Music Licensing Act: Will the WTO Decide the United States Must Pay to Play?, 40 I.E. 2000, 20, Concord: University of New Hampshire School of Law
- Mitchell, K.M.W. (2013), Developing Country Success in WTO Disputes, 47 J.W.T. 2013, 77, Alphen aan den Rijn: Wolters Kluwer
- Owens, R. (2003), TRIPS and the Fairness in Music Arbitration: The Repercussions, 52 E.I.P.R 2003, 49, London: Sweet & Maxwell
- Pauwelyn, J. (2010), The Dog that Barked but Didn't Bite: 15 Years of Intellectual Property Disputes at the WTO, SSRN Abstract 1708026 of 14 November 2010 (=1 J. Int'l Dispute Settlement 389–429 (2010)), available at http://ssrn.com/abstract=1708026 (accessed 20 May 2015)
- Schlochauer, H.J. (1987), International Court of Justice, in R. Bernhardt (Ed.), Encyclopedia of Public International Law, Vol. 1, Amsterdam: Elsevier Science Publishers
- Stoll, P.-T., Busche, J. & Arend, K. (2009), WTO Trade-Related Aspects of Intellectual Property Rights, Leiden: Martinus Nijhoff
- Straus, J. (2013), Global Intellectual Property and Innovation Landscape in 1990 and Today, in A. Matlak & S. Stanislawska-Kloc (Ed.), Spory o Własność Intelektualną (Ksiega jubileuszowa dedykowana Profesorom Januszowi Barcie i Ryszardowi Markiewiczowi), Warszawa: Wolters Kluwer Polska
- Taubman, A., Wager, H. & Watal, J. (2014), A Handbook on the WTO TRIPS Agreement, Cambridge: Cambridge University Press

Merging ACTA into TRIPS: Does TRIPS-Based IP Enforcement Need Reform?

Thomas Jaeger

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Abstract The 20 years that the TRIPS Agreement now boasts are a long time in IP legislation: The world has changed, but TRIPS has not. Should it have changed? After all, we have seen a number of recent initiatives for new multilateral IP regimes in free trade agreements such as, to name just a few, TPP, RCEP, TTIP or, of course, ACTA. These multilateral initiatives may in fact tell us something about the state and quality of TRIPS: Perhaps, they answer to needs not considered and provided for in TRIPS or contain new, better approaches to known issues. The consequence of an affirmative answer would be that clearly, a revision or an abandonment of TRIPS should be contemplated. This contribution compares the

Dr. Thomas Jaeger is Senior Research Fellow at the Max Planck Institute for Innovation and Competition, Munich.

Max Planck Institute for Innovation and Competition, Munich, Germany e-mail: thomas.jaeger@ip.mpg.de

T. Jaeger (⊠)

enforcement provisions of two recent agreements, the failed ACTA and the TPP currently under negotiation, to TRIPS for an analysis of where differences lie and how any differences should be assessed.

1 New Challenges to an Old Agreement

The Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) has aged since 1994. There is a lingering sense among policymakers and parts of the industry that the rules laid down in TRIPS are no longer sufficient. As is evidenced by a recently growing number of proposals for new international agreements pushing beyond the level of TRIPS in bi- and multilateral trade relations¹ and even in unsuspicious fora such as the Council of Europe,² this is particularly so in the area of enforcement.

One prominent initiative attempting to push beyond the existing TRIPS enforcement provisions was the Anti-Counterfeiting Trade Agreement (ACTA) of 2010.³ It aimed at the work over of the framework for the civil, criminal and border enforcement of IP rights and at enhancing enforcement practices and international cooperation, particularly as concerned enforcement in the digital environment. Justified or not, ACTA caused a major public outcry against allegedly ever more severe enforcement measures in European states in particular. As a consequence, the European Parliament rejected the ratification of ACTA in 2012.⁴

While the original proposal for ACTA is therefore dead, its underlying concern is not. Its provisions may likely resurface in some form or another, and further agreements dealing with IP and IP enforcement are actually on the horizon. They seem to bear witness to a widespread dissatisfaction with TRIPS and its enforcement chapter in particular, although scholars are split on whether that dissatisfaction is more prevalent on the part of the so-called developing countries, more on that of the so-called developed countries or perhaps even on both sides of the global

¹ For a recent overview of the EU's initiatives and policy, see the various contributions in J. Drexl, H. Grosse Ruse-Khan & S. Nadde-Phlix (2014), EU Bilateral Trade Agreements and Intellectual Property: For Better or Worse?.

² See e.g. the motion for a resolution "Intellectual Property Rights in the Digital Era", http://assembly.coe.int/nw/xml/XRef/Xref-DocDetails-EN.asp?fileid=20574&lang=EN&search=ZGlnaX RhbCBlcmE= (accessed 21 July 2014); for an overview over working documents on intellectual property see: http://semantic-pace.net/default.aspx?search=Y2F0ZWdvcnlfc3RyX2VuOiJXb3JraW5nIGRvY3VtZW50Ig==.

³ For the full text of the ACTA Agreement see: http://trade.ec.europa.eu/doclib/docs/2010/december/tradoc_147079.pdf.

⁴ See the European Parliament (2012), ACTA before the European Parliament, press release of 4 July 2012.

trade and development divide.⁵ That dissatisfaction has resulted in a growing web of free trade agreements including IP provisions alongside, or rather on top of, TRIPS. Although free trade agreements are entered into for all sorts of (typically opaque) reasons and trade-offs between parties of different social and economic backgrounds, the desire to alter or add onto the TRIPS regime is always present among at least some of the state parties involved (those pressing for the inclusion of an IP chapter).⁶ Whatever the precise stakes in a given setting may be, it seems that overall, states have lost interest in TRIPS,⁷ i.e. in using, interpreting and furthering TRIPS.

More examples for the sidestepping of TRIPS via multilateralism are easily found. Already in 2009 for instance, ⁸ negotiations were launched between the EU and Canada for a Comprehensive Economic and Trade Agreement covering, apart from classic free trade issues, also substantive and enforcement provisions on copyright modeled after ACTA. ⁹ On an even broader scale, the currently envisaged Trans-Atlantic Trade and Investment Partnership (TTIP) between the EU and the US, negotiations for which were launched in mid-2013, is also set to contain a chapter on IP protection. ¹⁰ Similarly on the US west coast, i.e. around the Pacific Rim, a large free-trade agreement has been under negotiation since 2012 between the then ASEAN member states and Australia, China, India, Japan, Korea and New Zealand, named Regional Comprehensive Economic Partnership (RCEP). ¹¹ It will include an extensive IP chapter, the working group for which has already been set up. Alongside RCEP and reinforcing it, another comprehensive free trade agreement in terms of participants and matters covered is currently being negotiated

⁵ On this debate, see, e.g., J. Straus (2012), A Marriage of Convenience: World Economy and Intellectual Property from 1992 to 2012, 40 AIPLA Qu. J. 2012, 633, 665; A. Kur & H. Grosse Ruse-Khan (2012), Enough is Enough – The Notion of Binding Ceilings in International Intellectual Property Protection, in A. Kur & M. Levin (Eds.), Intellectual Property Rights in A Fair World Trade System: Proposals for Reform of TRIPS, pp. 359, 364.

⁶ For an attempt to dissect negotiating interests behind IP agreements among the different groups of states, R. Hilty & T. Jaeger (2010), Legal Effects and Policy Considerations for Free Trade Agreements: What is Wrong with FTAs?, Max Planck Institute for Intellectual Property, Competition & Tax Law Research Paper No. 10-02 of 15 January 2010, pp. 17 et seq.

⁷ Similarly J. Straus (2012), A Marriage of Convenience: World Economy and Intellectual Property from 1992 to 2012, 40 AIPLA Qu. J. 2012, 633, 665, 674 et seq.

⁸ Cf., in this context, also the free-trade agreement cluster created by the EU under the name of economic partnerships (EPAs), fn. 2; similarly, a spaghetti bowl of bi- and multilateral agreements progressively spans across the Asia-Pacific region, cf. fn. 12 and 13.

⁹ For further information about the Comprehensive Economic & Trade Agreement (CETA) see the summary available at http://eu-canada.com/about/canada-eu-trade-agreement/; see also the factsheet on "The EU's Free Trade Agreement with Canada and its Intellectual Property Rights Provisions".

¹⁰ See text of the EU Draft Mandate, COM (2013) 136 fin, pts. 21 et seq.

¹¹ Cf. Malaysian Ministry of International Trade and Industry Media Release of 27 January 2014, 3rd Meeting of the RCEP Trade Negotiation Committee 20–24 January 2014, Kuala Lumpur, Malaysia.

in the Pacific area, the Trans-Pacific Partnership (TPP). ¹² Negotiating parties are the states of the existing P4 free trade Agreement of 2005¹³ (Brunei, Chile, New Zealand, Singapore) and the entrant parties Australia, Canada, Japan, Malaysia, Mexico, Peru, the United States and Vietnam. The idea is to significantly expand the P4 Agreement to become the TPP. While the P4 Agreement currently only briefly deals with IP and has no specific enforcement provisions, the TPP draft text boasts an extensive IP chapter including enforcement.

These initiatives and others reflect developments going on particularly in the EU and the US, where clusters of legislation aiming at expanding and deepening IP protection and at stepping up enforcement formed over the last decade. ¹⁴ In the enforcement area in particular, legislative examples for the EU include the IP enforcement Directive of 2004, ¹⁵ the 2003 and 2013 reforms of the border measures Regulation, ¹⁶ the 2013 draft for a directive on the protection of trade secrets and their enforcement ¹⁷ or the currently shelved proposal for a criminal sanctions directive. ¹⁸ In the US, the 1998 Digital Millennium Copyright Act, the unsuccessful

¹² TPP Negotiations, IP Group, Intellectual Property [Rights] Chapter, consolidated draft text of 5 October 2015, available at http://www.wikileaks.org/tpp-ip3/.

¹³ Trans-Pacific Strategic Economic Partnership Agreement of 18 July 2005.

¹⁴ Cf. also H. He (2010), The Development of Free Trade Agreements and International Protection of Intellectual Property Rights in the WTO Era – New Bilateralism and Its Future, 41 IIC 2010, 253, 270 et seq.; P. Yu (2004), Currents and Crosscurrents in the International Intellectual Property Regime, 38 Loy. L.A. L. Rev. 2004, 42.

¹⁵The European Parliament and the Council, Directive 2004/48/EC on the Enforcement of Intellectual Property Rights, OJ 2004, L 157, 45 of 29 April 2004; for more, see A. Kur (2004), The Enforcement Directive – Rough Start, Happy Landing, 35 IIC 2004, 821; see also R. Knaak (2004), Die EG-Richtlinie zur Durchsetzung der Rechte des geistigen Eigentums und ihr Umsetzungsbedarf im deutschen Recht, 53 GRUR Int. 2004, 745.

¹⁶Council Regulation (EC) No 1383/2003 concerning customs action against goods suspected of infringing certain intellectual property rights and the measures to be taken against goods found to have infringed such rights, OJ 2003, L 196, 7 of 22 July 2003; The European Parliament and the Council, Regulation (EU) No 608/2013 concerning customs enforcement of intellectual property rights and repealing Council Regulation (EC) No 1383/2003, OJ 2013, L 181, 15 of 12 June 2013; for more, see T. Jaeger et al. (2010), Statement of the Max Planck Institute for Intellectual Property, Competition and Tax Law on the Review of EU Legislation on Customs Enforcement of Intellectual Property Rights, 41 IIC 2010, 674.

¹⁷ Proposal for a Directive on the Protection of Undisclosed Know-How and Business Information (Trade secrets) against their unlawful Acquisition, Use and Disclosure, COM (2013) 813 fin; for more, see R. Hilty, A. Kur & R. Knaak (2014), Stellungnahme des Max-Planck-Instituts für Innovation und Wettbewerb vom 12.5.2014 zum Vorschlag der Europäischen Kommission für eine Richtlinie über den Schutz vertraulichen Know-hows und vertraulicher Geschäftsinformationen (Geschäftsgeheimnisse) vor rechtswidrigem Erwerb sowie rechtswidriger Nutzung und Offenlegung vom 28.11.2013, COM (2013) 813 final, 63 GRUR Int. 2014, 554.

¹⁸ The European Parliament (Committee on Legal Affairs), Report on the amended Proposal for a Directive of the European Parliament and of the Council on Criminal Measures aimed at ensuring the enforcement of intellectual property rights, COM(2006)0168 fin; for more see R. Hilty, A. Kur & A. Peukert (2006), Stellungnahme des Max-Planck-Instituts für Geistiges Eigentum, Wettbewerbs- und Steuerrecht zum Vorschlag für eine Richtlinie des Europäischen Parlaments

2011 initiatives of the PROTECT IP Act, the Stop Online Piracy Act and the more moderate alternative proposal for an Online Protection and Enforcement of Digital Trade Act in particular can be mentioned here.¹⁹

Should these national and international developments be built into TRIPS? Has TRIPS become anachronistic? Multilateral IP initiatives like the TPP, RCEP, TTIP or ACTA may be read as indicators to that effect. In any case, they can be used as benchmarks for the state and quality of the TRIPS Agreement today: If the multilateral initiatives answer to current intrinsic needs of the international IP regime for which TRIPS does not provide or if they contain more modern and more adequate solutions to existing problems, TRIPS should clearly be revised or perhaps even abandoned for the benefit of a new, better IP agreement. The yield of assumption can be checked by comparing the provisions of the newer regimes to those of TRIPS: What differences exist and how are they to be assessed vis-à-vis the IP system's overall functionality in terms of affording protection that is both tailored to actual market requirements and balanced between right holders and third parties?

This analysis will be undertaken in the following—limited to the exemplary area of enforcement. No draft texts are available yet for the TTIP and the RCEP, but we have the ACTA text and a leaked text for the TPP. ACTA and the TPP will therefore serve as the measuring stick for that comparison.

2 ACTA and TRIPS

ACTA²⁰ is entirely devoted to making IP enforcement effective beyond the provisions of TRIPS.²¹ Compared to TRIPS,²² ACTA does not just spell out the framework of IP enforcement in more detail, it actually lays down a largely new

und des Rates über strafrechtliche Maßnahmen zur Durchsetzung der Rechte des geistigen Eigentums, COM (2006) 168 final, 55 GRUR Int. 2006, 722.

¹⁹The Digital Millennium Copyright Act of 1998, Pub. L. No. 105-304, 112 Stat. 2860 of 28 October 1998, for more information see http://www.copyright.gov/legislation/dmca.pdf; the PROTECT IP Act: 112th Congress, S.968.IS; the Stop Online Privacy Act: 112th Congress, H.R. 3261; the Online Protection and Enforcement of Digital Trade Act: 112th Congress, S.2029.IS; see also O. Kerr (2002), A Lukewarm Defense of the Digital Millennium Copyright Act, in A. Thierer & W. Crews (Eds.), Copy Fights: The Future of Intellectual Property in the Information Age; M. Carrier (2013), SOPA, PIPA, ACTA, TPP: An Alphabet Soup of Innovation-Stifling Copyright Legislation and Agreements, 11(2) Nw. J. Tech. & Intell. Prop. 2013, 21

²⁰ For the full text of the ACTA Agreement see: http://trade.ec.europa.eu/doclib/docs/2010/december/tradoc_147079.pdf.

²¹ Cf. Articles 1 and 3 ACTA.

²² For an assessment of ACTA vis-à-vis TRIPS (and other provisions, including existing EU legislation) see also E. Matulionyte et al. (2011), Opinion of European Academics on Anti-Counterfeiting Trade Agreement, 2(1) JIPITEC 2011, 65. The Comments [of the European

regime with significantly tougher standards. This, however, is done entirely for the benefit of right holders: Rights of defense, insofar as they are provided for at all, essentially correspond to what is already contained in TRIPS.

2.1 Civil Enforcement

A number of provisions in ACTA seem to resemble TRIPS at first sight. Yet upon a closer examination, the balance of rights in TRIPS is shifted insofar as rights of defense are either omitted or rights of the right holder are expanded in specific parts.

An example for the first observation (omission) can already be found in Article 6 ACTA stipulating the general principles for enforcement. Article 6 at first glance seems to restate the wording of Article 41 TRIPS, but unlike that norm, it simply omits the due process guarantees stipulated in paras. 3 and 4 of Article 41. Another example can be taken from Article 10 ACTA, dealing with (final) remedies. It comes without the proportionality clause included in the corresponding Article 46 TRIPS as a corrective for excessive remedies. Also in relation to the right of information, a proportionality clause contained in Article 47 TRIPS did not find its way into the corresponding Article 11 ACTA. Likewise, as one last example for this point, the standard of *prima facie* proof required in Article 50(3) TRIPS for the availability of provisional measures (sufficient certainty of infringement by the defendant) is simply omitted in the corresponding norm of Article 12 ACTA, which, consequently, operates without specifications on a required minimum standard of proof.

Similarly, Article 8 ACTA on injunctions provides an example for the second aforementioned observation (expansion): Again, the regulatory yield of that provision seems to correspond to Article 44 TRIPS at first glance. Yet while Article 8 includes injunctions against third parties involved in the distribution of infringing goods, Article 44 does not. Another example can be found in Article 9(5) ACTA, concerning the recovery of court costs and attorney fees, which looks similar to Article 45(2) TRIPS, but unlike that norm adds a half sentence including "any other expenses" incurred in the trial, like the costs of experts, additional counsel and the like. In common law jurisdictions, which place emphasis on the legal argument developed in trial, this inconspicuous half sentence may become a significant economic factor to be taken into account by the weaker party (in cases of alleged counterfeiting or piracy typically the defendant). An example can also be taken from Article 10(3) ACTA dealing with (final) remedies, which, unlike under the corresponding Article 46 TRIPS, may be sought at the infringer's expense.

Commission] on this opinion (Commission Services Working Paper of 27 April 2011) are available at http://trade.ec.europa.eu/doclib/docs/2011/april/tradoc_147853.pdf. See also H. Grosse Ruse-Khan (2010), From TRIPS to ACTA: Towards a New "Gold Standard" in Criminal IP Enforcement?, in C. Geiger (Ed.), Criminal Enforcement of Intellectual Property: A Blessing or a Curse?, pp. 12 et seq.

An expansion of rights also takes place were a simple option under TRIPS to provide for rights of the right holder is transformed into an obligation, as is, for example, the case with the right holder's right to obtain information from the infringer under Article 11 ACTA (as compared to Article 47 TRIPS). Finally, to give one last example for this point, Article 12 ACTA expands the availability of provisional measures as compared to the similar provision of Article 50 TRIPS. For instance, while otherwise largely following the example of Article 50 TRIPS, Article 12(4) ACTA names the seizure of infringing goods and materials and the taking of documentary evidence as possible provisional measures in copyright and trademark cases.

Sometimes, ACTA is just more detailed than TRIPS. In filling the level of detail that TRIPS leaves open, ACTA in effect also imposes obligations beyond the level of enforcement under TRIPS by restricting the freedom of states to interpret and implement international obligations in a flexible, tailor-made manner. Article 9 ACTA concerning damages for example goes into great detail regarding the standard of proof and the calculation of damages, while Article 45 TRIPS imposes a relatively coarse, brief and, consequently, ambiguous damages standard. Article 9 ACTA is in fact not just a tougher, but rather a slightly different rule: It is, on the one hand, stricter, for example concerning the standard of proof in that (unlike Article 45(2) TRIPS) it always requires knowledge or negligence as a precondition for the recovery of profits or payment of pre-established damages. On the other hand, Article 9 ACTA is broader in terms of the rights accorded, for example as concerns the type of damages that can be sought, in that the option to include lost profits accorded in Article 45(2) TRIPS is replaced by a compulsory standard to that effect. The "may"²³ used in Article 9(1) ACTA does not amount to an implementing option upon the legislator, but to one for the right holder in choosing the means to substantiate the amount of damages sought. Similarly, to state another example, Article 9(4) ACTA provides for a compulsory additional option for the right holder to seek pre-established damages or rely on presumptions for the calculation of damages (e.g. that the damages correspond to the quantity of the infringing goods, etc.).

An interesting example for more detailed obligations in ACTA as compared to TRIPS is also Article 11 ACTA on the right of information. That norm is significantly longer and more precise than the corresponding Article 47 TRIPS. For example, Article 11 ACTA lays down details such that the information request may come from the right holder or be *ex officio* and that the information sought can be used for the purpose of collecting evidence. Article 11 ACTA also states in detail examples for the type of information that can be sought. Nonetheless, even at the great level of precision that Article 11 ACTA noticeably seeks to provide, key terms are left open to interpretation. For example, the notion of the level of proof *prima facie* for the presence of an infringement for which the defendant is responsible,

²³ Article 9(1) ACTA: "shall have the authority to consider [...] any legitimate measure of value the right holder submits, which may include lost profits".

i.e. the "justified request", is not circumscribed in any way. This is in spite of the fact that Article 11 ACTA is expressly intended to aid the right holder in their pre-trial collection of evidence to build the case. The lack of a statement of some minimum parameters for assessing the justification of information requests invites potential misuse or at least overly excessive use of this right by the right holder and introduces a lasting procedural disparity between the parties. As was mentioned earlier in the context of omissions of balancing mechanisms between the parties, similar observations and criticism can be advanced against Article 12 ACTA, where the minimum standard of proof required in Article 50(3) TRIPS for the availability of provisional measures was not taken over.

2.2 Border Measures

The picture of a one-sided expansion of right holders' rights and the ensuing procedural imbalances between the parties that was observed regarding civil procedures is prolonged in the area of border measures. This already begins where the rights included are multiplied in Article 13 ACTA (all IP rights) as compared to Article 51 TRIPS (copyright and trademarks, other rights optional). The scope of the regime is also broadened as concerns the acts caught. Whereas Article 51 TRIPS relates only to importation and exportation, Article 16(2) ACTA introduces an option to extend the regime to goods in transit or otherwise under customs control.²⁴ Similarly, the regime is broadened where *ex officio* action is made mandatory under Article 16(1)(a) ACTA as compared to the mere option contained in Article 58 TRIPS.

Just like what was seen for civil procedures, ACTA's border measures regime comes with much more detail than that of TRIPS. This approach includes frequent additions to the rights available for right holders. As concerns, for example, the application by the right holder, Article 17 ACTA is significantly more detailed than the corresponding Article 52 TRIPS and includes some additions. To state one illustration, Article 17(2) provides for the possibility to direct one application against multiple shipments or only to selected points of entry and exit. Similarly as regards (final) remedies, Article 20(3) ACTA transcends the corresponding provision of Article 59 TRIPS where administrative penalties imposed on top of measures directed against the infringing goods are included as an option.

However, the opposite trend of taking out details contained in the TRIPS Agreement can also be observed. For instance, Article 19 ACTA stipulates that the "competent authorities may determine [...] whether the suspect goods infringe an intellectual property right." This leaves open which authorities are meant here,

²⁴ On the issue of seizures of goods in transit in the EU, H. Grosse Ruse-Khan & T. Jaeger (2009), Policing Patents Worldwide? EC Border Measures against Transiting Generic Drugs under EC and WTO Intellectual Property Regimes, 40 IIC 2009, 502, passim.

i.e. the customs authorities themselves or other authorities such as courts charged with separate proceedings for a decision on the merits of the case. Article 55 TRIPS, by contrast, clearly distinguishes between "the customs authorities" initiating and managing the holdup of goods under the border measures regime and "the duly empowered authority" in proceedings leading to a decision on the merits. This distinction is significant not only in terms of fair trial guarantees and decisional quality, but also already on the initial level of the border measures procedure: Where the merits of the holdup and the fate of the goods are decided by a separate entity, the right holder will be under an obligation to lodge those separate proceedings or else lose its protection under the border measures regime. If, by contrast, the customs authorities themselves or an entity close to them is charged with rendering a final decision, the applicant is in a significantly better procedural position and can, in addition, expect a lesser burden to substantiate the presence of an infringement as compared to trial in court. As was highlighted, this advantage occurs independently of follow-on questions such as concerns overly sufficient observation of fair trial guarantees (starting with the right to be heard on the merits, which typically are of no concern in border measures chapters)²⁵ before customs authorities.

It was observed before that in the context of civil procedures, several balancing mechanisms for party interests contained in TRIPS were not taken over, let alone expanded, in ACTA. This observation also holds true for the border measures section, for example insofar as a provision similar to Article 58(c) TRIPS dealing with the liability of authorities vis-à-vis the defendant is nowhere to be found. However, the border measures regime of ACTA partially also turns this observation of missing balancing mechanisms around in an interesting way: It includes balancing mechanisms to the benefit of the right holder beyond what TRIPS requires. A telling example here is given by Article 17(1) ACTA concerning the right holder's application. It stipulates that, of course, information must be supplied as to the prima facie existence of an infringement and the infringing goods. However, there is a cap to how much information authorities may require: Only such information may be requested that can "reasonably be expected to be within the right holder's knowledge", and it must not go so far as to "unreasonably deter recourse" by the right holder to the border measures procedures. This therefore amounts to a double safeguard standard operational for the right holder. Applications can only be rejected or suspended in execution if the applicant has abused procedures or there is other due cause. 26 Article 52 TRIPS, by contrast, speaks of "adequate evidence to satisfy the [...] authorities" that an infringement is present

²⁵ Cf. in this regard already the TRIPS regime, where defendant rights are mentioned in limited contexts only: Article 54 (notice of suspension to the defendant), 57 (right to inspection of the goods) and 58 (b) (notice of suspension in ex officio cases) TRIPS. By contrast and unlike the right holder, the defendant is not accorded independent remedies before the customs authorities as regards the decision to dispose of the goods, but must instead turn to the judiciary, cf. Article 59 TRIPS.

²⁶Cf. Article 17(4) ACTA.

and of a "sufficiently detailed description of the goods". On that basis, the authorities inform the applicant "whether they have accepted the application". This sounds a lot less friendly to the right holder. TRIPS also contains a safeguard against too high thresholds for access of right holders to the border measures procedures, but only in the context of excessive financial securities to forestall abuse.²⁷ That norm is therefore in essence a counter-balancing mechanism operational for the right holder: To protect the defendant, a security payment may be required (initial balance), but it must not be excessively high (counter-balance). This norm thus seeks to fix a deterrent against abusive or negligent recourse to the procedures at a level acceptable for both parties. The ACTA balancing mechanism in the context of applications is nothing like that, but actually negatively impacts the balance of interests: The lower the threshold for access to the procedures on the basis of prima facie evidence is set, the more applicants are put at a procedural and economic advantage vis-à-vis defendants whose goods may unduly be held up by potentially abusive or negligent applications. Apart from the security payment that may also be imposed under Article 18 ACTA, there is no counter-balance here to correct the imbalance and protect the defendant against border measures on the basis of weak prima facie evidence.

The security payment clause contained in Article 18 ACTA is also interesting for two other features. For once, the provision of Article 56 TRIPS that clarifies the defendant's right to compensation if procedures are abused, is not explicitly restated in ACTA. Second, Article 18 ACTA is much stricter than the corresponding norm of Article 53(2) TRIPS: While Article 18 restricts repossession of the defendant of the goods in return for payment of a security only to "exceptional circumstances or [...] a judicial order", Article 53(2) TRIPS generally entitles the defendant to a release of the goods in exchange for a security payment where the initial period of suspension (normally 10 days) has expired and no further provisional measures were granted or judicial proceedings initiated.

A last mention shall be made here of the right of information in Article 22 ACTA, which again goes far beyond its counterpart in Article 57 TRIPS. Article 57 stipulates an optional possibility to forward information about the consignor, importer and consignee and the quantity of the goods in question from the customs authorities to the right holder under the relatively strict limitation that "a positive determination has been made on the merits of a case". Article 22 ACTA, by contrast, is quite generous as regards information sharing: In addition to all information about goods, consignor, etc., the right holder may also be informed regarding the details of specific shipments expected to come in. Also, that sharing of information is, with the exception of information about expected shipments, no longer optional.

²⁷ Cf. Article 53(1) TRIPS.

2.3 Criminal Enforcement

With its Article 61, the TRIPS Agreement devotes only relatively little space to the question of criminal sanctions for IP infringements.²⁸ They are made compulsory for trademark counterfeiting and copyright piracy on a commercial scale and remain optional in relation to infringements of all other IP rights. Sanctions allow for an optional choice between just monetary fines and imprisonment and are put under a proportionality clause.

In ACTA by contrast, criminal enforcement is given ample room. The chapter, like TRIPS, covers trademark counterfeiting and copyright piracy, but beyond or in precision of TRIPS also extends to the importation and domestic use in the course of trade of infringing goods, infringements occurring on the Internet and on digital networks and the circumvention of copy control mechanisms.²⁹ An inclusion of the recording of movies in cinemas is optional.³⁰ Also beyond TRIPS, aiding and abetting with respect to these offences and the criminal liability of legal persons are expressly covered. ³¹ In terms of penalties, imprisonment and monetary fines are both mandatory under Article 24 ACTA, which also stipulates that penalties must be sufficiently grave to represent an effective deterrent. Similarly, seizure, forfeiture and destruction figure among the standard remedies in Article 25 ACTA and are not limited to "appropriate cases" as in Article 61 TRIPS. Article 25(5) ACTA also goes beyond Article 61 TRIPS in providing for an optional seizure of the assets derived from an infringement or of other assets corresponding to that value. Likewise not to be found in TRIPS is a mandatory power for authorities to become active ex officio with respect to criminal offences.³

Again, similarly to the civil proceedings and border measures chapters, ACTA's criminal measures chapter does not contain any safeguards to ensure a balance of interests between parties and guarantee a due process.³³ There is, in particular, no prohibition of misuse of criminal procedures and no rule on the cross-link between evidence collected in criminal procedures for use in civil proceedings. Similarly, the alleged infringer's right to be heard and other fair trial guarantees are not mentioned either in the context of the overall criminal process or for the decisions regarding seizure, forfeiture and destruction in particular.

²⁸ For more detail, see A. Wechsler (2012), Spotlight on China: Piracy, Enforcement, and the Balance Dilemma in Intellectual Property Law, in A. Kur & M. Levin (Eds.), Intellectual Property Rights in A Fair World Trade System: Proposals for Reform of TRIPS, p. 61 passim; E. Matulionyte et al. (2011), Opinion of European Academics on Anti-Counterfeiting Trade Agreement, 2(1) JIPITEC 2011, 65, pts. 6 et seq. and 14.

²⁹ Cf. Articles 23(1) and (2) and 27 ACTA.

³⁰Cf. Article 23(3) ACTA.

³¹ Cf. Article 23(4) and (5) ACTA.

³²Cf. Article 26 ACTA.

³³ See also E. Matulionyte et al. (2011), Opinion of European Academics on Anti-Counterfeiting Trade Agreement, 2(1) JIPITEC 2011, 65 pt. 10.

2.4 The Digital Environment

Article 27 ACTA deals with acts of infringement in the digital environment as something the TRIPS Agreement did not yet foresee. Clearly, the protection afforded under TRIPS is broad and flexible enough to be applied to infringements on the Internet, in digital networks and the like without difficulty.³⁴ What is particularly tricky in the digital context, however, is the delineation of conditions under which intermediaries like Internet, hosting or website providers are liable for infringements by their clients and what conditions may be imposed on them to end the infringement, deny access or disclose user information.³⁵ These limitations cannot easily be derived from the general clauses of TRIPS and even if they could, such an exercise would hardly provide adequate legal certainty for parties.

So even if the goal to adapt international IP enforcement for the digital age is noble in principle, the way this is done in ACTA cannot be deemed a model for TRIPS reform: The rules are unbalanced both in terms of potentially overstretching the scope of copyright protection as well as in terms of the balance between parties in civil and criminal procedures. In terms of the first observation (scope) for example, ³⁶ Article 27 ACTA includes a markedly broad definition of technological measures, including measures having both legal and illegal functions, and prohibits both acts of circumvention as well as preparatory acts. In spite of the breadth of that approach, copyright exceptions and limitations are not specifically protected to ensure their exercise and enforcement. Instead, the extent of an availability of exceptions, limitations and defenses is optional and left to the national laws.³⁷ As regards the second observation (procedural balance) for example, ³⁸ Article 27 (4) ACTA again takes a decidedly generous approach vis-à-vis the issue of disclosure of client data by infringing as well as non-infringing intermediaries, which is, in particular, broader than the (optional) right of information under Article 47 TRIPS. The protection of fundamental rights "such as freedom of expression, fair process, and privacy" is only mentioned in Article 27(4) ACTA in a general fashion without circumscription of any parameters. What is more, no safeguards exist to delineate the relationship and prevent potential abuse of information obtained under that right of information in civil proceedings or, as was also highlighted before in the context of the criminal chapter, deal with the cross-links

³⁴ P. Judd (2011), Toward a TRIPS Truce, 32 Mich. J. Int'l L. 2011, 613, 649 et seq.

³⁵ L. Burke (2010), International Media Pirates: Are they making the Entertainment Industry walk the Plank?, 4 J. Bus. Entrepreneurship & L. 2010, 67, 72 et seq.; H. Wollgast (2007), IP Infringements on the Internet – Some Legal Considerations, 2007(1) WIPO Magazine.

³⁶ See also E. Matulionyte et al. (2011), Opinion of European Academics on Anti-Counterfeiting Trade Agreement, 2(1) JIPITEC 2011, 65, pt. 15.

³⁷Cf. Article 27(8) ACTA.

³⁸ See also E. Matulionyte et al. (2011), Opinion of European Academics on Anti-Counterfeiting Trade Agreement, 2(1) JIPITEC 2011, 65, pt. 16.

between information obtained in criminal proceedings and separate civil proceedings.

2.5 Transparency and Environment

The digital environment is however not the only area where ACTA responds to modern day challenges that could or would not be recognized at the time that TRIPS was concluded. Two more provisions deserve to be mentioned here.

The first is Article 30 ACTA, dealing with the promotion of transparency in IP rights enforcement and essentially stipulating obligations to publish information about the availability of procedures, the legal framework, judicial decisions and enforcement initiatives. Sadly thus, the header "transparency" for Article 30 is somewhat undeserved as it does not actually contain any prescriptions regarding the key point of transparency as understood from the point of view of the principle of good administration, ³⁹ i.e. administrative transparency in terms of access to files, participation rights and the like. Instead, Article 30 ACTA seems designed more as an obligation to promote IP policies—something not quite the same as transparency in the proper sense. But even if the heading is euphemistic or even misleading, this should not distract attention from the fact that administrative transparency is a modern issue and that mechanisms should be carved at least in broad terms to promote it: Transparency in IP enforcement procedures will promote more informed and thus better decisions, render an abuse of procedures harder and improve the overall balance between (economically or procedurally) stronger vis-à-vis weaker parties via public information and (ideally) participation. ACTA contains no model for such a rule, but the issue deserves attention.

The second provision to be mentioned in this context is Article 32 ACTA, which introduces environmental concerns to IP enforcement. This is at least what can be expected from its heading. Looked at more specifically, Article 32 lacks bite in that it simply stipulates that a destruction of IP infringing goods is to take place in consistency with the environmental laws at the place of destruction. So that norm as such is an empty, redundant shell. Nonetheless, again, although the execution of the concern in ACTA is inadequate, the question as to what happens to infringing goods, what uses they may still serve (e.g. in combating poverty, hunger or diseases), and if they are to be destroyed, how that should take place in an environmentally friendly way, deserves attention today.

³⁹ Cf D.-U. Galetta (2007), Inhalt und Bedeutung des europäischen Rechts auf eine gute Verwaltung, 42 EuR 2007, 57, 64 et seq.; see also ECJ, Kamino International Logistics and Datema Hellmann Worldwide Logistics, C-129/13 and C-130/13, EU:C:2014:2041, pts. 28 et seq.; ECJ, N. H. N./Minister for Justice, Equality and Law Reform, Ireland, Attorney General, C-604/12, EU:C:2014:302, pts. 49 et seq.

2.6 Summary

In sum, ACTA constitutes a one-sided increase of right holder enforcement rights and remedies. ACTA clearly seeks to address a number of contemporary challenges for which TRIPS contains no explicit answer. A part of these challenges comes from new technical and social developments like infringements on the Internet, satellite transmissions, in-cinema recordings, transparency or environmental and health concerns, while another part is rooted in the speed at which the globalization of trade and communication has unfolded since the early 1990s and thereby the augmented cross-border nature of infringing acts and of manufacture and distribution channels and intensified the incidence and complexity of cross-border lawsuits. In terms of an answer to the question raised at the outset, i.e. does TRIPS need reform and is ACTA a suitable measuring stick, the result of the analysis conducted here is clearly negative: In spite of the new issues tackled as compared to TRIPS, the one-sided and excessive way in which ACTA approaches those issues cannot be a model for TRIPS reform. In this, the provisions of ACTA seem driven by lobbyism more than by actual enforcement needs and as such do not stand out as an indicator for a need to reform the TRIPS regime.

3 The TPP and TRIPS

The TPP text⁴⁰ on which the following assessment is based is a leaked version from 2013. It is a consolidated text in the sense that it includes proposals and alternative wordings which are not agreed upon and are sometimes subject to opposition. So parts of what is discussed in the following might not actually make its way into the final agreement. Nonetheless, this is also a feature that makes the draft particularly interesting, as it shows where points of disagreement and discussion lie and how interests are distributed among the parties.

The TPP text resembles ACTA in many ways, because the wording often seems close to ACTA. For its general approach, accordingly, the TPP incorporates significant TRIPS-plus enforcement similar to what was observed above for ACTA. Upon a closer look, however, the TPP appears surprisingly balanced in many respects. But the TPP is also different from ACTA in respects which may be rooted in the specific negotiating context, i.e. owing to the countries involved. In particular, the common law background of many TPP parties, in particular the US, seems to have influenced several details of how IP rights and IP enforcement are shaped in the TPP. Provisions such as a presumption of ownership and validity of an IP right in civil, criminal and administrative proceedings, ⁴¹ punitive damages or the

⁴⁰ See supra fn. 12.

⁴¹ Cf. Article OO.H.2 TPP.

recovery of full trial costs can be named here as examples for a common law, or perhaps: US-style, hallmark in parts of the Agreement. Similarly, unlike in Article 6 ACTA or Articles 7 and 41(2) TRIPS, there is no general proportionality clause in the TPP—again perhaps against the background that common law courts regularly subject their assessment to an equity test anyway. And not least, US handwriting might be suspected in the TPP's markedly strict approach in the area of criminal enforcement.

3.1 Civil Enforcement

The civil enforcement chapter in the TPP starts out with damages as the central remedy for infringements. Here, Article QQ.H.4 largely takes over the standard of Article 45(1) TRIPS, i.e. compensation for intentional or negligent IP infringements. In counterfeiting and piracy cases (and optionally for other IP rights) however, the TPP follows the standard of Article 9(1) to (3) ACTA, i.e. recovery of profits attributable to the infringement, calculation of damages according to retail price, lost profits, etc. and availability of pre-established damages and additional damages. Even compared to ACTA however, the damages provisions in the TPP are extremely generous, owing to the incorporation of punitive elements: In assessing additional damages, Article OO.H.4(10) accords courts the widest possible freedom to award all damages "they consider appropriate, having regard to all relevant matters, including the nature of the conduct and the need to deter similar infringements in the future." An earlier US proposal (Article QQ.H.4.Y(6) Draft of 30 August 2013) that would have allowed for treble damages in patent cases, i.e. damages three times the amount of the infringement value, was later dropped. A remnant of this is the generous cost recovery standard of Article QQ.H.4(11), corresponding to Article 9(5) ACTA, which allows for court costs, "appropriate attorney's fees [and] any other expenses provided for under [national] law." However, unlike TRIPS or ACTA, Article QQ.H.4(16) TPP contains a safeguard against excessive costs for court experts by subjecting them to rules of reason and proportionality.

Under a similar logic as Articles 8(2) ACTA and 44(2) TRIPS, which limit remedies against uses of IP by governments, Article QQ.H.4(17) TPP limits damages claims directed against certain actors in the public domain, like libraries, archives, educational institutions or public broadcasting. For the draft text, it was still disputed whether this enforcement bar should be optional or mandatory (as proposed by the US). That bar to damages claims is both narrower and more specific than Articles 8(s) and 44(2): It is narrower in that it does not exclude all remedies (like injunctions), but only damages. It is more specific, because the types of institutions that are to profit from the enforcement bar are enumerated in the norm. The government in general does not figure among them and is therefore not, by virtue of that provision, immune to infringement claims. Although the wording and scope of that enforcement bar could arguably be more generous, the fact that

concrete, judiciable provisions were woven into the enforcement chapter to protect specific interests of the public domain is noteworthy particularly with a view to assessing potential TRIPS reform.

Alongside damages as the central remedy, other final remedies are available under Article QQ.H.4(12) TPP. The norm resembles the corresponding Articles 10 ACTA and 46 TRIPS. Similarly, the provisional measures contained in Articles QQ.H.4.Y(9) of the 2013 TPP Draft (likely Article QQ.H.4(8) in the 2015 version, but unclear due to an editorial mistake) and QQ.H.4(17) and QQ.H.5 TPP largely resemble the corresponding Articles 12 ACTA and 50 TRIPS.

As an additional leeway, injunctive relief is available under Article QQ.H.4 (5) TPP to prevent the entry of infringing goods into circulation. Initially, that standard corresponds to Article 44(1) TRIPS and Article 8(1) ACTA. What is interesting however is an addition made in Article QQ.H.4(6), which stipulates an anti-abuse clause for requests for injunctive relief and grants damages compensation to defendants thus "wrongfully enjoined or restrained". Neither ACTA nor TRIPS contain anything similar. This modern, pertinent and sufficiently judiciable norm stands in stark contrast to an alleged bad habit in international agreements lamented here and elsewhere to carefully carve out ever-increasing rights for right holders while largely neglecting or dealing only superficially with the rights and procedural interests of the opposing parties. As such, this provision looks like a model fit for transferal into other agreements, including TRIPS.

Moreover, a similar safeguard is contained in Article QQ.H.4(14) TPP regarding misuse of information obtained under the right of information contained in the preceding para. (13) of that norm. That right of information is similar to what can be found in Article 11 ACTA. Unlike ACTA (or TRIPS), however, para. (14) stipulates that sanctions may be imposed against parties, counsels, experts or others for violating confidentiality in the context of court orders to produce information. Again, this is a welcome break of routine in terms of weaving balancing procedural provisions into IP enforcement. The provision in Article QQ.H.4(14) is not yet ideal in that regard, as it leaves open whether such sanctions should be available just in the course of proceedings (and therefore resemble what most states will foresee anyway in their procedural courts in relation to violations of court orders), or whether (as would be desirable) the violation should bind parties even after a judgment has been rendered and thus entitle the injured party to an independent basis for follow-on litigation in case of a confidentiality breach or information misuse. So while the issue as such is a point to bear in mind when looking at the potential reform of TRIPS enforcement, the actual formulation leaves room for improvement.

Yet another proposed (optional) safeguard fell through in the negotiation process: Article QQ.H.4.Y(16) TPP Draft of 30 August 2013 stipulated that,

⁴² Cf. M. Stieper (2011), Das Anti-Counterfeiting Trade Agreement (ACTA) – wo bleibt der Interessenausgleich im Urheberrecht?, 60 GRUR Int. 2011, 124, 125 et seq.; A. Metzger (2010), Perspektiven des internationalen Urheberrechts –Zwischen Territorialität und Ubiquität, 65 JZ 2010, 929, 931 et seq.; P. Yu (2010), Six Secret (and Now Open) Fears of ACTA, 64 SMU L. Rev. 2010, 975, 1059 et seq.

particularly as concerned litigation in the pharmaceutical sector, parties bringing "vexatious or unreasonable proceedings" may have been sanctioned. No details as to the sanctions or other measures to discourage vexatious litigation were stated. As such, this safeguard was too vague to be made operational in court and left ample discretion as to its transformation to national procedural law. Nonetheless, we may attach value to the symbolic gesture of addressing the economically and legally significant problem of vexatious litigation in IP and of clarifying that such actions deserve to be sanctioned even within the IP framework, i.e. where they do not exceed the threshold of a potential violation of antitrust laws. ⁴³ Here again, we identify a candidate for consideration in the context of potential TRIPS reform.

3.2 Border Measures

The TPP's border measures regime as laid down in its Article QQ.H.6 is inconspicuous: It is devised narrower in scope than Article 13 ACTA and similar to Article 51 TRIPS, in that only counterfeit and piracy goods destined for import are covered, while goods in transit are not covered. Beyond that, the substance of the regime is quite similar to ACTA. It does not merit an in-detail discussion here beyond what was said before in the context of ACTA's border measures regime.

3.3 Criminal Enforcement

Criminal enforcement under Article QQ.H.7 TPP initially follows the example of ACTA, but in fact expands beyond it in many respects. Already in terms of scope, like ACTA, it likely (versions differ somewhat here) covers wilful trademark counterfeiting and copyright piracy on a commercial scale and importation or exportation of infringing goods, 44 in-cinema recordings 45 and infringements in the digital environment including TV retransmissions. 46 Yet beyond ACTA, Articles QQ.H.8 and QQ.H.9 TPP extend criminal prosecution to the infringement of trade secrets and the protection of encrypted satellite and cable transmissions.

In this regard, the very detailed regime of Article QQ.I TPP for limiting the liability of Internet service providers who comply with certain conditions is to be pointed out. That regime does not only transcend TRIPS, which is silent on the issue, and even Article 27 ACTA on enforcement in the digital environment, which

⁴³ On the issue of spurious litigation in antitrust cf. D. Sokol (2012), The Strategic Use of Public and Private Litigation in Antitrust as Business Strategy, 85 S. Cal. L. Rev. 2012, 689, 696 et seq. ⁴⁴ Cf. Article QQ.H.7(1) and (2) TPP.

⁴⁵ Cf. Article QQ.H.7(5) TPP Draft of 30 August 2013; not in the 2015 text.

⁴⁶ Cf. Article QQ.H.10 TPP Draft of 30 August 2013 (paragraph missing in the 2015 version, but likely an editorial mistake) and QQ.H.11 TPP.

only briefly stipulates certain obligations for Internet service providers while remaining vague in terms of factors limiting their liability. Without entering into the details of whether the liability of Internet service providers is eventually set up adequately in the TPP, the issue as such is certainly a point to be considered when assessing the need for a reform of TRIPS.

As under Articles 23(4) and 26 ACTA, aiding and abetting is covered 47 and ex officio action by authorities is compulsory. 48 As in Article 24 ACTA, penalties are to include imprisonment alongside monetary fines. Likewise, as in Article 25 ACTA and similar to Article 61 TRIPS, further measures include seizure of the goods and any related materials and documentary evidence as well as the forfeiture of assets derived from the infringement or of assets of corresponding value. 49 Beyond Article 25, authorities are authorized to release or provide access to the infringing goods to the right holder for their use in separate civil proceedings. 50 This provision resembles somewhat the right of information accorded to the right holder under Article 11 ACTA, which is also explicitly linked to the purpose of allowing the right holder to collect information. It was said above in the context of Article 11 that this provision is problematic in civil proceedings for lack of safeguards against abuse. In criminal proceedings, however, it appears entirely misplaced: Any utilization of the very far-reaching tools of criminal law to the benefit of one party in civil procedure is to be rejected for its severe impact on party equality in those proceedings. 51 This is, for example, one reason why in Europe, access to files in (procedurally similar) administrative antitrust cases for the purpose of private follow-on litigation is handled very restrictively.⁵²

⁴⁷ Cf. Article QQ.H.7(5) TPP.

⁴⁸ Cf. Article QQ.H.7(6)(g) TPP.

⁴⁹ Cf. Article QQ.H.7(6)(c) to (e) TPP.

⁵⁰Cf. Article QQ.H.7(7)(f) TPP.

⁵¹ Cf. also R. Hilty, A. Kur & A. Peukert (2006), Stellungnahme des Max-Planck-Instituts für Geistiges Eigentum, Wettbewerbs- und Steuerrecht zum Vorschlag für eine Richtlinie des Europäischen Parlaments und des Rates über strafrechtliche Maßnahmen zur Durchsetzung der Rechte des geistigen Eigentums, COM (2006) 168 final, 55 GRUR Int. 2006, 722, 723 et seq.; A. Wechsler (2012), Spotlight on China: Piracy, Enforcement, and the Balance Dilemma in Intellectual Property Law, in A. Kur & M. Levin (Eds.), Intellectual Property Rights in A Fair World Trade System: Proposals for Reform of TRIPS, pp. 79 et seq.; E. Matulionyte et al. (2011), Opinion of European Academics on Anti-Counterfeiting Trade Agreement, 2(1) JIPITEC 2011, 65, pts. 6 et seq.; The European Parliament (Committee on Legal Affairs), Report on the amended Proposal for a Directive of the European Parliament and of the Council on Criminal Measures aimed at ensuring the Enforcement of Intellectual Property Rights, COM(2006)0168 – C6-0233/2005 – 2005/0127(COD), A6-0073/2007 fin, pp. 19 et seq.; C. Buccafusco & J. Masur (2014), Innovation and Incarceration: An Economic Analysis of Criminal Intellectual Property Law, 87 (2) S. Cal. L. Rev. 2014, 275.

⁵² Cf. ECJ, Bundeswettbewerbsbehörde/Donau Chemie AG and Others, C-536/11, not yet published, pts. 29 et seq.; A. Weitbrecht (2012) Schadensersatzansprüche der Unternehmer und Verbraucher wegen Kartellverstößen, 65 NJW 2012, 881, 884 et seq.

A significant step beyond the criminal enforcement level set by ACTA would have been made by the US proposal for Article QQ.H.7(3) TPP Draft of 30 August 2013, which suggested criminal sanctions "even absent wilful [...] counterfeiting or [...] piracy" for the counterfeiting of labels and for trafficking in labels or packaging "likely to cause confusion". This provision, which was dropped at a later stage, would have brought an extremely far-reaching criminalization of IP uses in the grey zone below the wilful counterfeit threshold and is, at least from a European perspective, to be seen very critically. ⁵³

3.4 Exhaustion and Interests of the Public Domain

The 30 August 2013 Draft of the TPP contained two very ambitious provisions, which will briefly be discussed here. Regrettably, both were later deleted in the negotiations. The first was the brief, albeit only optional, stipulation of an international exhaustion of rights in Article QQ.A.12 TPP. Although exhaustion affects the existence of the right and therefore resorts to the sphere of substantive provisions otherwise not dealt with here, it has significant procedural effects in terms of limiting the enforceability of rights. Neither TRIPS, which in its Article 6 expressly excludes the issue of international exhaustion, nor ACTA contain a provision to this effect. Clearly however, as the globalization of trade and free trade initiatives progress, the issue of an international exhaustion of rights becomes ever more prominent and the TPP is evidence for this dynamic. Perhaps it might be time for a more ambitious approach under the TRIPS regime as well. However, Article QQ. A.11 TPP now just states that parties may determine the if and how of exhaustion freely.

The second issue likewise concerns something of great contemporary importance, which neither TRIPS nor ACTA take up. Article QQ.A.13 TPP 2013 contained safeguards for protection of the public domain, i.e. for keeping certain information free from monopolization via IP rights. As such, Article QQ.A.13 had

⁵³ Cf. also R. Hilty, A. Kur & A. Peukert (2006), Stellungnahme des Max-Planck-Instituts für Geistiges Eigentum, Wettbewerbs- und Steuerrecht zum Vorschlag für eine Richtlinie des Europäischen Parlaments und des Rates über strafrechtliche Maßnahmen zur Durchsetzung der Rechte des geistigen Eigentums, COM (2006) 168 final, 55 GRUR Int. 2006, 722, 723 et seq.; A. Wechsler (2012), Spotlight on China: Piracy, Enforcement, and the Balance Dilemma in Intellectual Property Law, in A. Kur & M. Levin (Eds.), Intellectual Property Rights in A Fair World Trade System: Proposals for Reform of TRIPS, pp. 79 et seq.; E. Matulionyte et al. (2011), Opinion of European Academics on Anti-Counterfeiting Trade Agreement, 2(1) JIPITEC 2011, 65, pts. 6 et seq.; The European Parliament (Committee on Legal Affairs), Report on the amended Proposal for a Directive of the European Parliament and of the Council on Criminal Measures aimed at ensuring the Enforcement of Intellectual Property Rights, COM(2006)0168 – C6-0233/2005 – 2005/0127(COD), A6-0073/2007 fin, pp. 19 et seq.; C. Buccafusco & J. Masur (2014), Innovation and Incarceration: An Economic Analysis of Criminal Intellectual Property Law, 87 (2) S. Cal. L. Rev. 2014, 275.

immense symbolic value, although it was not in itself operational. Nonetheless, the norm was expressly drafted as a precursor to developing tools for a balanced limitation of IP protection and, consequently, IP enforcement. For example, Article QQ.A.13 called for an initiative to delineate the subject matters falling into the public domain and for the creation of databases for registered rights on the one hand and for access to public domain materials on the other. Again, as is the case with discussions on the aforementioned issue of international exhaustion, Article QQ. A.13 would have been but a starting point and indicator for contemporary pressing issues which need closer reflection in an international regime, e.g. the TRIPS regime. And again, the provision was worked down: Article QQ.B.x now just vaguely and briefly speaks of respect for the public domain.

3.5 Summary

The TPP is an interesting, modern agreement which lays open heterogeneous concerns in IP enforcement and which is not easily accessible to a simple overall assessment. The different proposals throughout the TPP negotiations have has model character for other international regimes like TRIPS especially in terms of its noticeable efforts to weave justiciable defendant and third-party rights into the IP enforcement regime: Some proposals stood in stark contrast to most international agreements which tend to carefully carve out ever-increasing rights for right holders while largely neglecting or dealing only superficially with the rights and procedural interests of the opposing parties. This positive assessment of the TPP history concerns particularly the area of civil enforcement and certain horizontal features (exhaustion and public domain protection) and comes notwithstanding the fact that the wording of those provisions in detail may be debatable and that the overall regime generally is often very close to the ACTA model and, like ACTA, excessive. Regrettably, not all of those provisions made it into later versions of the text, so that its latest draft is considerably less ambitious and resembles the classic, known approaches to IP chapters more closely than before.

The criminal enforcement chapter of the TPP in particular seems very problematic in several respects, notably as regards an overly excessive scope of criminal enforcement and its potentially severe cross-impact in civil enforcement. That chapter brings a far-reaching criminalization of IP infringing acts and acts in a grey zone below outright counterfeiting and piracy, which sacrifices proportionality considerations over a principal aim of the strongest possible deterrence. While counterfeiting and piracy are clearly problems of significant economic impact, this excessive recourse to criminal law as the single most important solution proposal is to be rejected not only as an encroachment upon individual freedoms and fundamental rights, but also because it completely detracts attention from the actual social, economic and cultural reasons behind counterfeiting and piracy. It is those reasons, which should receive more attention, not the substitute, problematic and eventually probably useless recourse to criminal law.

4 Findings

Turning back to our initial question whether ACTA and the TPP in particular indicate that the TRIPS Agreement needs reform, we observe, first, that TRIPS is in many respects still the better Agreement: Its provisions are more balanced, fairer and more flexible, already because more options are given to states for implementation and the level of regulatory detail is often lower. Both ACTA and the TTIP, by contrast, bring about potential over-enforcement. This is already so in the areas of civil procedures and border enforcement, but holds particularly true in the criminal enforcement area. ⁵⁴

Second, however, and this cannot be neglected in spite of the manifold flaws detected, both Agreements are clearly more modern than TRIPS in that they address a limited number of issues that were not or could not have been considered in TRIPS. So even though TRIPS is good and still adequate in principle, the regime is old. New issues, which the foregoing analysis shows, have come up over the last 20 years of evolution of free trade, and which deserve attention also in the TRIPS context relate to, in particular

- building judiciable safeguards against procedural abuse. This concerns three major areas of potential abuse, namely
 - the bringing of vexatious proceedings. The key issue here would be to define certain indicative parameters for the presumption within IP law and, therefore, below the (particularly: dominance) thresholds of antitrust law. Sanctions should not only include the rejection of the action, but entitle unduly engaged parties to full damages;
 - abusive, excessive or gravely unfounded requests for injunctions. Here, liability instead of injunctions could be made and the rule and the availability of injunctions be limited to the protection of particularly grave interests (going beyond mere financial interests). In addition, parameters should be defined to ensure that a real *ex ante* assessment of the presumed merits of the case is carried out before injunctions are granted and negligent recourse to injunctions be deterred via a credible threat of damages on the part of the applicant;
 - misuse of information obtained in proceedings after the close of proceedings.
 Here, it should be clarified that the use of information obtained in IP (civil or criminal) proceedings for competitive or commercial purposes forms a basis for independent damages actions on the part of the (former) defendant even after the close of the initial case.

⁵⁴ Equally A. Wechsler (2012), Spotlight on China: Piracy, Enforcement, and the Balance Dilemma in Intellectual Property Law, in A. Kur & M. Levin (Eds.), Intellectual Property Rights in A Fair World Trade System: Proposals for Reform of TRIPS, pp. 79 et seq., 97 et seq.; H. Grosse Ruse-Khan (2010), From TRIPS to ACTA: Towards a New "Gold Standard" in Criminal IP Enforcement?, in C. Geiger (Ed.), Criminal Enforcement of Intellectual Property: A Blessing or a Curse?, pp. 12 et seq.

• inclusion of a balanced framework of provisions regulating the rights, obligations and liability of intermediaries in the digital environment, particularly Internet service providers, in cases of alleged IP infringements by their clients.

- safeguards for a proactive protection of the interests of the public domain, namely through
 - a definition of matters falling within the public domain;
 - a limitation of remedies against certain actors of the public domain, such as, but not limited to, libraries, educational institutions and the like.
- safeguards for the protection of certain common interests in enforcement, e.g. as
 concerns the cross-link between enforcement remedies such as a destruction of
 infringing goods and the protection of the environment or potential beneficial
 uses of such goods under health, poverty reduction or nutritional aspects. This
 could be done either by clarifying the vague wording of Article 8 TRIPS in the
 general part of the agreement or by inclusion of a respective separate provision
 in the enforcement chapter.
- measures to promote enforcement transparency in IP, understood in particular as
 a principle of broad access to policy papers and files and the formulation of
 conditions for such access⁵⁵ and conditions for broad public participation in
 certain IP enforcement cases (particularly criminal cases).
- inclusion of a mandatory international exhaustion of certain IP rights and—notwithstanding Article 27(1) TRIPS⁵⁶—in certain sectors, e.g. patents, trademarks and designs for pharmaceutical products.
- criminal enforcement. The issue of modernizing the criminal enforcement regime is clearly a key interest for certain state parties, such as the US in particular. The only lasting way to forestall excessive pushes for criminal enforcement, as for instance undertaken in ACTA and the TPP, appears to be reopening the issue under TRIPS. This would accordingly imply a modernizing and elaborating of Article 61 TRIPS to include a limited and strictly defined number of severe infringement acts and corresponding penalties under a general ceilings approach: Key infringements of sufficient gravity should be covered and punishable, but states should no longer be allowed to go further in other international agreements (albeit, of course, independently in their national laws). Importantly also, such a provision would have to address the cross-links between criminal and civil enforcement and include safeguards against a negative impact of criminal investigations on the procedural equality of parties in civil proceedings.

The tackling of all these issues on the international level is important, but what is more, their inclusion in a multilateral agreement seems not entirely unrealistic: These issues have already surfaced in negotiations for multilateral IP agreements in

⁵⁵ Similarly H. Grosse Ruse-Khan et al. (2013), Principles for Intellectual Property Provisions in Bilateral and Regional Agreements, 44 IIC 2013, 878 pts. 14 and 28.

⁵⁶ Declaration on Patent Protection: Regulatory Sovereignty under TRIPS (Version 1.0 of 15 April 2014), paras. 7 et seq.

the past, so awareness of their relevance is present at least among some state parties. Where a modernization of TRIPS was contemplated along these lines, the examples ACTA and the TPP should, however, not be followed too closely. Their provisions could, perhaps with the only exception of Article QQ.H.4(6) TPP stipulating an anti-abuse clause for requests for injunctive relief and grants damages compensation to defendants, clearly be optimized.

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References

- Buccafusco, C. & Masur, J. (2014), Innovation and Incarceration: An Economic Analysis of Criminal Intellectual Property Law, 87(2) S. Cal. L. Rev. 2014, 275–334, Los Angeles: University of Southern California, available at SSRN: http://ssrn.com/abstract=2297488 (accessed 20 May 2015)
- Burke, L. (2010), International Media Pirates: Are they making the Entertainment Industry walk the Plank?, 4 J. Bus. Entrepreneurship & L. 2010, 67, Malibu: Pepperdine University School of Law
- Carrier, M. (2013), SOPA, PIPA, ACTA, TPP: An Alphabet Soup of Innovation-Stifling Copyright Legislation and Agreements, 11 Nw. J. Tech. & Intell. Prop. 2013, 21. Chicago: Northwestern University School of Law, available at SSRN: http://ssrn.com/abstract=2213034 (accessed 20 May 2015)
- Declaration on Patent Protection: Regulatory Sovereignty under TRIPS (Version 1.0 of 15 April 2014), published in 45 IIC 2014, 679, available at: http://www.ip.mpg.de/en/news/declaration_on_patent_protection.html (accessed 20 May 2015).
- Drexl, J., Grosse Ruse-Khan, H. & Nadde-Phlix, S. (2014), EU Bilateral Trade Agreements and Intellectual Property: For Better or Worse?, Berlin: Springer
- Galetta, D.-U. (2007), Inhalt und Bedeutung des europäischen Rechts auf eine gute Verwaltung, 42 EuR 2007, 57, Baden-Baden: Nomos
- Grosse Ruse-Khan, H. (2010), From TRIPS to ACTA: Towards a New 'Gold Standard' in Criminal IP Enforcement?, in C. Geiger (Ed.), Criminal Enforcement of Intellectual Property: A Blessing or a Curse?, p. 12, Cheltenham: Edward Elgar, available at SSRN: http://ssrn.com/abstract=1592104
- Grosse Ruse-Khan, H. et al. (2013), Principles for Intellectual Property Provisions in Bilateral and Regional Agreements, 44 IIC 2013, 878, Munich/Berlin: C.H. Beck/Springer
- Grosse Ruse-Khan, H. & Jaeger, T. (2009), Policing Patents Worldwide? EC Border Measures against Transiting Generic Drugs under EC and WTO Intellectual Property Regimes, 40 IIC 2009, 502, Munich/Berlin: C.H. Beck/Springer
- He, H. (2010), The Development of Free Trade Agreements and International Protection of Intellectual Property Rights in the WTO Era – New Bilateralism and Its Future, 41 IIC 2010, 253, Munich/Berlin: C.H. Beck/Springer
- Hilty, R. & Jaeger, T. (2010), Legal Effects and Policy Considerations for Free Trade Agreements: What is Wrong with FTAs?, Max Planck Institute for Intellectual Property, Competition & Tax Law Research Paper No. 10-02 of 15 January 2010
- Hilty, R., Kur, A. & Knaak, R. (2014), Stellungnahme des Max-Planck-Instituts für Innovation und Wettbewerb vom 12.5.2014 zum Vorschlag der Europäischen Kommission für eine Richtlinie über den Schutz vertraulichen Know-hows und vertraulicher Geschäftsinformationen (Geschäftsgeheimnisse) vor rechtswidrigem Erwerb sowie rechtswidriger Nutzung und

- Offenlegung vom 28.11.2013, COM (2013) 813 final, 63 GRUR Int. 2014, 554, Munich: C.H. Beck
- Hilty, R., Kur, A. & Peukert, A. (2006), Stellungnahme des Max-Planck-Instituts für Geistiges Eigentum, Wettbewerbs- und Steuerrecht zum Vorschlag für eine Richtlinie des Europäischen Parlaments und des Rates über strafrechtliche Maßnahmen zur Durchsetzung der Rechte des geistigen Eigentums, COM (2006) 168 final, 55 GRUR Int. 2006, 722, Munich: C.H. Beck
- Jaeger, T. et al. (2010), Statement of the Max Planck Institute for Intellectual Property, Competition and Tax Law on the Review of EU Legislation on Customs Enforcement of Intellectual Property Rights, 41 IIC 2010, 674, Munich/Berlin: C.H. Beck/Springer
- Judd, P. (2011), Toward a TRIPS Truce, 32 Mich. J. Int'l L. 2011, 613, Ann Arbor: Michigan Journal of International Law
- Kerr, O. (2002), A Lukewarm Defense of the Digital Millennium Copyright Act, in A. Thierer & W. Crews (Eds.), Copy Fights: The Future of Intellectual Property in the Information Age. Washington, DC: CATO Institute, available at SSRN: http://ssrn.com/abstract=330880 (accessed 20 May 2015)
- Kur, A. (2004), The Enforcement Directive Rough Start, Happy Landing, 35 IIC 2004, 821, Munich/Berlin: C.H. Beck/Springer
- Kur, A. & Grosse Ruse-Khan, H. (2012), Enough is Enough The Notion of Binding Ceilings in International Intellectual Property Protection, in A. Kur & M. Levin (Eds.), Intellectual Property Rights in A Fair World Trade System: Proposals for Reform of TRIPS, p. 359, Cheltenham: Edward Elgar
- Knaak, R. (2004), Die EG-Richtlinie zur Durchsetzung der Rechte des geistigen Eigentums und ihr Umsetzungsbedarf im deutschen Recht, 53 GRUR Int. 2004, 745, Munich: C.H. Beck
- Matulionyte, E. et al. (2011), Opinion of European Academics on Anti-Counterfeiting Trade Agreement, 2(1) JIPITEC 2011, 65, Göttingen: Universitätsverlag Göttingen
- Metzger, A. (2010), Perspektiven des internationalen Urheberrechts Zwischen Territorialität und Ubiquität, 65 JZ 2010, 929, Tübingen: Mohr Siebeck
- Sokol, D. (2012), The Strategic Use of Public and Private Litigation in Antitrust as Business Strategy, 85 S. Cal. L. Rev. 2012, 689, Los Angeles: University of Southern California, available at SSRN: http://ssrn.com/abstract=2028196 (accessed 20 May 2015)
- Stieper, M. (2011), Das Anti-Counterfeiting Trade Agreement (ACTA) wo bleibt der Interessenausgleich im Urheberrecht?, 60 GRUR Int. 2011, 124, Munich: C.H. Beck
- Straus, J. (2012), A Marriage of Convenience: World Economy and Intellectual Property from 1992 to 2012, 40 AIPLA Qu. J. 2012, 633, Arlington: American Intellectual Property Law Association
- Wechsler, A. (2012), Spotlight on China: Piracy, Enforcement, and the Balance Dilemma in Intellectual Property Law, in A. Kur & M. Levin (Eds.), Intellectual Property Rights in A Fair World Trade System: Proposals for Reform of TRIPS, p. 61, Cheltenham: Edward Elgar
- Weitbrecht, A. (2012) Schadensersatzansprüche der Unternehmer und Verbraucher wegen Kartellverstößen, 65 NJW 2012, 881, Munich: C.H. Beck
- Wollgast, H. (2007), IP Infringements on the Internet Some Legal Considerations, 2007 (1) WIPO Magazine. Geneva: WIPO, available at: http://www.wipo.int/wipo_magazine/en/2007/01/article_0005.html (accessed 20 May 2015)
- Yu, P. (2004), Currents and Crosscurrents in the International Intellectual Property Regime, 38 Loy. L.A. L. Rev. 2004, 42. Los Angeles: Loyola of Los Angeles Law Review, available at SSRN: http://ssrn.com/abstract=578572 (accessed 20 May 2015)
- Yu, P. (2010), Six Secret (and Now Open) Fears of ACTA, 64 SMU L. Rev. 2010, 975, available at SSRN: http://ssrn.com/abstract=1624813

Towards a Balanced International Legal Framework for Criminal Enforcement of Intellectual Property Rights

Christophe Geiger

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Abstract The harmonization of the legal framework for criminal enforcement of intellectual property rights (IPR) at the regional and international level has since its inception been a sensitive and difficult issue, mainly due to the diverging moral and cultural legal conceptions of negotiating parties and because of strong sovereignty issues traditionally raised by criminal law. Against this background, the current international provisions on the subject established in Article 61 of the TRIPS Agreement only provide for a minimum standard level on criminal measures for the infringement of intellectual property rights. This situation was perceived by many developed nations as the result of an ineffective multilateral approach and led them to advance precise and tougher TRIPS-plus provisions on criminal enforcement in bilateral, plurilateral or regional agreements. These efforts to strengthen the

Prof. Dr. Christophe Geiger is Associate Professor, Director General and Director of the Research Department of the Centre for International Intellectual Property Studies (CEIPI), University of Strasbourg.

C. Geiger (⊠)

CEIPI, Université de Strasbourg, Strasbourg, France

e-mail: christophe.geiger@ceipi.edu

646 C. Geiger

criminal framework in an undifferentiated manner caused strong counter-reactions and even led to the overall rejection of intellectual property rights protection in certain cases. The general tendency to criminalize end users in relation to copyright infringements on the Internet is a good example.

Therefore, a balanced and differentiated set of rules for criminal enforcement of intellectual property rights needs to be considered in order to secure in the long run the acceptance of intellectual property rights within society. In this specific context, the purpose of this chapter is to reflect on the proper design of a legal framework which would provide for a legitimate protection for IPRs through adequate and efficient enforcement measures, while at the same time taking into account the public interest and basic principles of justice such as proportionality, legal certainty, procedural justice and the protection of fundamental rights. For this purpose, the chapter begins with a closer look at the norms codified in the TRIPS Agreement and explores their flexibilities, in order to verify whether international standards allow Member States to implement criminal provisions on IP rights in their national legislation in accordance with their domestic needs and circumstances. Later, this chapter envisages a revision of the main requirements for the criminalization of IP infringements, especially the concept of "commercial scale", with the aim to propose a balanced and differentiated legal framework. In this sense, it suggests that when elaborating new conditions for the criminal enforcement of intellectual property rights, the international legislature should propose criteria that take into account the aggravated social harm caused by the infringement.

1 Introduction

Twenty years have now passed since the adoption of the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement)¹ in 1994, at that time the most ambitious multilateral intellectual property (IP) treaty. The Agreement has since been criticized from different perspectives, especially for not taking sufficiently into account the different levels of capacity for innovation and the interests of developing and least developed countries.² In recent times, however, following the increased efforts to harmonize upwards intellectual

¹ The TRIPS Agreement is reproduced as Annex 1 C of the Marrakesh Agreement Establishing the World Trade Organization, signed in Marrakesh on 15 April 1994.

² Critical literature on the TRIPS Agreement is too abundant to be quoted extensively. See for example D. Vaver & S. Basheer (2006), Popping Patent Pills: Europe and a Decade's Dose of TRIPS, 28 EIPR 2006, 282; J. Malbon & C. Lawson (2008), Interpreting and Implementing the TRIPS Agreement: Is it Fair?; B. Remiche & J. Kors (2007), L'Accord ADPIC, 10 Ans Après: Regards Croisés, Europe-Amérique Latine; C.M. Correa (2007), Trade Related Aspects of Intellectual Property Rights: A Commentary on the TRIPS Agreement; P.K. Yu (2006), TRIPs and its Discontents, 10 Marquette Intell. Prop. L. Rev. 2006, 369.

property regimes at the international level (in what has often been called a "TRIPS—plus" manner), the provisions agreed upon during the Uruguay Round negotiations have started to be perceived in a new light.³

With regard to enforcement, while some of the pre-existing international intellectual property conventions such as the Paris Convention for Industrial Property and the Berne Convention for the Protection of Literary and Artistic Works contained some provisions on the issue, none of them included rules on criminal measures for infringement of intellectual property rights (IPRs). Therefore, in the context of intellectual property agreements with wide membership, Article 61 of the TRIPS Agreement is unique and creates an international benchmark for criminal enforcement procedures. However, this international rule rapidly came to be seen by many developed nations as the result of an ineffective multilateral approach which insufficiently protects their enforcement interests, leading them to advance stronger provisions on criminal enforcement in bilateral or plurilateral agreements.

³ See for example J. Watal (2014), Is TRIPS a Balanced Agreement from the Perspective of Recent Free Trade Agreements?, in J. Drexl, H. Grosse Ruse-Khan & S. Nadde-Phlix (Eds.), EU Bilateral Trade Agreements and Intellectual Property: For Better or Worse?, p. 41; G.D. Dinwoodie & R.C. Dreyfuss (2005), WTO Dispute Resolution and the Preservation of the Public Domain of Science under International Law, in K.E. Maskus & J.H. Reichman (Eds.), International Public Goods and Transfer of Technology under a Globalized Intellectual Property Regime, p. 861.

⁴ Paris Convention for the Protection of Industrial Property, 21 UST 1583, 828 UNTS 305 of 20 March 1883 as revised at Stockholm on 14 July 1967.

⁵ Berne Convention for the Protection of Literary and Artistic Works, 1161 UNTS 3 of 9 September 1886 as amended on 29 September 1979.

⁶ For example, see Article 9 of the Paris Convention on the seizure of infringing trademarks in the country of importation and in the country of origin; Article 13 of the Berne Convention on the seizure of infringing recordings in the country of importation or Article 16 of the Berne Convention on the seizure of infringing copies in the country of importation.

⁷ For a more detailed discussion, see C. Geiger (2012), Weakening Multilateralism in Intellectual Property Lawmaking: A European Perspective on ACTA, 3 WIPO J. 2012, 166.

⁸ A good example of a bilateral agreement in this sense is the EU's Free Trade Agreement (FTA) with South Korea; see Free Trade Agreement between the European Union and its Member States, of the one part, and the Republic of Korea, of the other part, OJ 2011 L 127 of 14 May 2011, Articles 10.54 et seq. More generally on enforcement provisions in bilateral treaties, see X. Seuba (2013), Intellectual Property in Free Trade Agreements: What Treaties, What Content?, 16 JWIP 2013, 240.

⁹ In this sense, a plurilateral example dealing also with criminal enforcement of intellectual property rights is the Anti-Counterfeiting Trade Agreement (ACTA), an initiative aimed at combating the proliferation of counterfeiting within the global economy. ACTA was negotiated outside the multilateral framework between the European Union and ten other countries, Australia, Canada, the Republic of Korea, the United States of America, Japan, the Kingdom of Morocco, the United Mexican States, New Zealand, the Republic of Singapore and the Swiss Confederation. Another example are the ongoing negotiations on the Trans-Pacific Partnership (TPP) agreement between Brunei Darussalam, Chile, New Zealand, the Republic of Singapore, Australia, Canada, Malaysia, the United Mexican States, Peru, the United States of America, Vietnam, and Japan.

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The main justification usually used to support a "new gold standard" on enforcement of intellectual property rights in general, and to strengthen the criminal IP framework in particular, is the spread of counterfeiting and piracy on a global scale, often presented as an ever-growing international phenomenon with major economic and social repercussions. As a response, legislatures have been looking for ways to introduce new, or to increase existing sanctions for intellectual property infringements, including criminal penalties. These efforts have resulted in a tendency to tackle criminal enforcement of intellectual property rights at the global level through a "one size fits all" approach, a trend which has been widely criticized as ignoring the complexity of criminal law and the need to differentiate between the various intellectual property rights, the infringing situations and the sanctions involved.

In light of both the steadily rising level of criminal enforcement mechanisms and the diversity of means of achieving the desired standards, the purpose of this chapter is to address the question of the proper design of a legal framework for criminal enforcement. In this specific context, the chapter analyses the norms established in international law, in particular the TRIPS Agreement (Sect. 2), before exploring the flexibilities provided by the Agreement for a more inclusive interpretation of criminal provisions, especially taking into account other doctrines and rules of international law (Sect. 3). Finally, the chapter envisages a revision of the main requirements for the criminalization of IP infringement, especially of the concept of "commercial scale" (Sect. 4).

¹⁰ H. Grosse Ruse-Khan (2012), Criminal Enforcement and International IP Law, in C. Geiger (Ed.), Criminal Enforcement of Intellectual Property: A Handbook of Contemporary Research, p. 184.

¹¹ See in particular the figures quoted in the OECD (2009), Magnitude of Counterfeiting and Piracy of Tangible Products: An Update, p. 1. Nevertheless, the methodology of the study has been criticized, as is often the case with reports that attempt to quantify the economic impact of intellectual property rights infringement. More recently, there have been other attempts to provide additional empirical data such as the jointly released study between the European Patent Office (EPO) and the Office for Harmonization in the Internal Market (Trade Marks and Designs) (OHIM) (2013), mainly focussing on the value of intellectual property rights for jobs and economic growth. For more detail on the reasons advanced by policy makers in this regard, see C. Geiger (2014), The Rise of Criminal Enforcement of Intellectual Property Rights . . . and Its Failure in the Context of Copyright Infringements on the Internet, in S. Frankel & D. Gervais (Eds.), The Evolution and Equilibrium of Copyright in the Digital Age, p. 113.

¹² More generally on the trend to globalize IP issues see P.K. Yu (2007), The International Enclosure Movement, 82 Ind. L.J. 2007, 901–906.

¹³ See M. Bitton (2013), Rethinking the Anti-Counterfeiting Trade Agreement's Criminal Copyright Enforcement Measures, 102 J. Crim. Law Criminol. 2013, 73, who states: "Each paradigm is based on different moral and doctrinal foundations, and the lack of coherence as to why each paradigm is applied further intensifies the moral ambiguity in criminalizing intellectual property violations". See also C. Geiger (2014), The Rise of Criminal Enforcement of Intellectual Property Rights . . . and Its Failure in the Context of Copyright Infringements on the Internet, in S. Frankel & D. Gervais (Eds.), The Evolution and Equilibrium of Copyright in the Digital Age, p. 113.

2 Harmonizing Upwards: The Trend to Strengthen Criminal Measures at the International Level

Extending criminal law into the field of intellectual property has always been controversial. ¹⁴ Since its inception, the harmonization of the international framework for criminal enforcement of IPRs has been a sensitive and difficult issue, mainly due to diverging moral and cultural legal conceptions of negotiating parties ¹⁵ and because of strong sovereignty issues ¹⁶ traditionally raised by criminal law. ¹⁷ In this respect, it is not surprising that during the negotiations of the Agreement on Trade-Related Aspects of Intellectual Property, there were very important disagreements concerning the form of IP infringement that should be subject to criminal enforcement ¹⁸ and, as a result, in the final text of the Agreement, Article 61 sets only a minimum standard level for the adoption of criminal measures.

2.1 The International Provisions on IP Criminal Enforcement and Their Judicial Interpretation

Article 61 of the TRIPS Agreement requires Member States to "provide for criminal procedures and penalties to be applied at least in cases of wilful trademark counterfeiting or copyright piracy on a commercial scale." Hence, Article 61 has a limited scope, as the mandatory criminal procedures and penalties cover only trademarks and copyright and apply only in cases of counterfeiting and piracy,

¹⁴ For a more detailed discussion, see C. Geiger (2014), The Anti-Counterfeiting Trade Agreement (ACTA) and Beyond: Towards a Differentiated Approach to Criminal Enforcement of Intellectual Property Rights at Global Level, in P. Roffe & X. Seuba (Eds.), The ACTA and the Plurilateral Enforcement Agenda: Genesis and Aftermath, p. 100.

¹⁵ See in this sense for example D.P. Harris (2008), The Honeymoon is over: The U.S.-China WTO Intellectual Property Complaint, 32 Fordham Int'l L. J. 2008, 146.

¹⁶ In relation to the agreed minimum standards in the TRIPS Agreement and the issue of sovereignty, an author has observed: "Few things touch the delicate nerve of national sovereignty more than the autonomous capacity of states to administer their domestic laws in conformity with their own legal philosophies"; see J.H. Reichman (1997), Enforcing the Enforcement Procedures of the TRIPS Agreement, 37 Va. J. Int'l L. 1997, 339–340.

¹⁷ See in this sense T. Mylly (2012), Criminal Enforcement and European Union Law, in C. Geiger (Ed.), Criminal Enforcement of Intellectual Property: A Handbook of Contemporary Research, p. 215: "Criminal law – together with the disposition of the police monopoly on the use of force – has traditionally been thought of as an area belonging to the core of national sovereignty and competence".

¹⁸ On the history of the Uruguay round of negotiations and the preparatory work to the TRIPS Agreement regarding criminal enforcement, see A. Adam (2011), What is "Commercial Scale"? A Critical Analysis of the WTO Decision in WT/DS362/R, 33 EIPR 346 et seq.

under the condition that the infringement is willful¹⁹ and is carried out on a commercial scale.²⁰ According to the last sentence of the provision, Member States may introduce criminal sanctions covering other forms of infringement of intellectual property rights, though this is only optional. The TRIPS Agreement defines in footnote 14 of Article 51 the categories of trademark counterfeiting and copyright piracy, which is relevant in determining the types of infringements that require imposition of criminal sanctions.²¹ The criminal remedies available under Article 61 include imprisonment, fines or both. When appropriate, they also must cover "seizure, forfeiture and destruction of the infringing goods" and the means used to create them. The available remedies must constitute a deterrent to further infringements.²²

This legal framework of international criminal enforcement measures was the result of a compromise. The negotiation history of the TRIPS Agreement clearly shows that Member States were meant, as stated in Article 1(1) of the Agreement, ²³ to have considerable flexibility when deciding how to implement these criminal penalties in their national law. This was confirmed by the WTO Panel decision in a case the United States brought against China, in which the provisions on criminal procedures and penalties regarding intellectual property rights were closely

¹⁹ The willfulness requirement has been understood as "to correspond to the *mens rea* element (criminal intent) of crimes in common law systems" (emphasis in original): D. Gervais (2003), The TRIPS Agreement: Drafting History and Analysis, p. 327. It has indeed been confirmed by a WTO Panel that "this word, focusing on the infringer's intent, reflects the criminal nature of the enforcement procedures at issue". See WTO Panel (2009), Report on China – Measures Affecting the Protection and Enforcement of Intellectual Property Rights, WT/DS362/R of 26 January 2009, p. 83.

²⁰ For a comment, see C.M. Correa (2009), The Push for Stronger Enforcement Rules: Implications for Developing Countries, in C.M. Correa & C. Fink (Eds.), The Global Debate on the Enforcement of Intellectual Property Rights and Developing Countries, p. 40; H. Grosse Ruse-Khan (2012), Criminal Enforcement and International IP Law, in C. Geiger (Ed.), Criminal Enforcement of Intellectual Property: A Handbook of Contemporary Research, p. 175; A. Taubman (2011), A Practical Guide to Working with TRIPS, p. 111.

²¹ As Carlos Correa explained: "Finally, it is to be noted that the current initiatives by developed countries to enhance enforcement rules and mechanisms are often associated with expansive concepts of 'counterfeiting' and 'piracy'. Correctly interpreted, these concepts are limited to very specific types of infringing acts, as defined in footnote 14 to article 51 of the TRIPS Agreement". See C.M. Correa (2009), The Push for Stronger Enforcement Rules: Implications for Developing Countries, in C.M. Correa & C. Fink (Eds.), The Global Debate on the Enforcement of Intellectual Property Rights and Developing Countries, p. 32.

²² See Article 61 of the TRIPS Agreement.

²³ Article 1(1) of the TRIPS Agreement reads as follows: "Members shall give effect to the provisions of this Agreement. Members may, but shall not be obliged to, implement in their law more extensive protection than is required by this Agreement, provided that such protection does not contravene the provisions of this Agreement. Members shall be free to determine the appropriate method of implementing the provisions of this Agreement within their own legal system and practice" (emphasis added).

analysed.²⁴ The United States alleged that China did not provide in its national legislation for criminal penalties against copyright infringement on a commercial scale, thus failing to comply with Article 61 of the TRIPS Agreement. Because the concept of "commercial scale" is sufficiently vague to leave enough room for flexible interpretations, ²⁵ and given this internationally sensitive issue, the WTO Panel remained very cautious when interpreting the provision, explaining that "commercial scale" referred "to counterfeiting or piracy carried on at the magnitude or extent of typical or usual commercial activity with respect to a given product in a given market". ²⁶ Thus, the Panel held that "commercial scale" should take into account the circumstances of the case and the available evidence of commerciality, adding that the interpretation of the scope of the obligation depended on the nature of the product, on the market in question and on the scale of the infringements.

Such a cautious understanding of the notion of "commercial scale" makes it possible to adapt the obligations under the Agreement in terms of penalties to the specific domestic circumstances and needs of the country in question. This differentiated approach adopted by the Panel is not surprising when one takes into account the history of the Agreement and the difficulty to agree on a common standard. However, the consequence was that the enforcement rules in the TRIPS Agreement were considered to be relatively weak, ²⁷ as has been pointed out by

²⁴Panel Report, China - Measures Affecting the Protection and Enforcement of Intellectual Property Rights, WT/DS362/R, adopted 20 March 2009, DSR 2009; V. p. 2097. For a comment, see R. Creemers (2009), The Effects of World Trade Organization Case DS362 on Audiovisual Media Piracy in China, 31 EIPR 2009, 568; H. Xue (2009), Enforcement for Development: Why not an Agenda for the Developing World?, in X. Li & C.M. Correa (Eds.), Intellectual Property Enforcement: International Perspectives, p. 133; H. Xue (2009), An Anatomical Study of the United States versus China at the World Trade Organization on Intellectual Property Enforcement, 31 EIPR 2009, 292; D. Gervais (2009), China - Measures Affecting the Protection and Enforcement of Intellectual Property Rights, 103 AJIL 2009, 549; H. Grosse Ruse-Khan (2012), Criminal Enforcement and International IP Law, in C. Geiger (Ed.), Criminal Enforcement of Intellectual Property: A Handbook of Contemporary Research, p. 171; P.K. Yu (2012), Shaping Chinese Criminal Enforcement Norms through the TRIPS Agreement, in C. Geiger (Ed.), Criminal Enforcement of Intellectual Property: A Handbook of Contemporary Research, p. 286; P.K. Yu (2010), The US-China Dispute over TRIPS Enforcement, 5 Drake University Law School Occasional Papers in Intellectual Property Law; P.K. Yu (2011), The TRIPS Enforcement Dispute, 89 Neb. L. Rev. 2011, 1046; A. Adam (2011), What is "Commercial Scale"? A Critical Analysis of the WTO Decision in WT/DS362/R, 33 EIPR 2011, 342.

²⁵ See H. Grosse Ruse-Khan (2012), Criminal Enforcement and International IP Law, in C. Geiger (Ed.), Criminal Enforcement of Intellectual Property: A Handbook of Contemporary Research, p. 174: "It is important to highlight the limited scope of Art. 61 TRIPS and its inherent flexibilities as well as those external ones which allow WTO Member States to implement criminal procedures tailored to domestic circumstances".

²⁶ Panel Report, China – Measures Affecting the Protection and Enforcement of Intellectual Property Rights, WT/DS362/R, adopted 20 March 2009, DSR 2009:V, p. 2097, para. 7.577.

²⁷ J. Watal (2014), Is TRIPS a Balanced Agreement from the Perspective of Recent Free Trade Agreements?, in J. Drexl, H. Grosse Ruse-Khan & S. Nadde-Phlix (Eds.), EU Bilateral Trade Agreements and Intellectual Property: For Better or Worse?, p. 46: "Although the TRIPS

many scholars like Jerome Reichman and David Lange or Peter Yu, who even called the enforcement provisions the "Achilles' heel" of the Agreement. ²⁸ This is exactly the reason why stronger provisions on criminal enforcement were included in the Anti-Counterfeiting Trade Agreement (ACTA), ²⁹ and attempts are made to introduce them in various other treaties, such as in the Trans-Pacific Partnership (TPP) agreement. ³⁰

2.2 The New Global Standard on Criminal Procedures and Penalties of IPRs

In fact, Article 23 of ACTA defines acts carried out on a "commercial scale" as "commercial activities for direct or indirect economic or commercial advantage", which broadens considerably the notion and seems far less flexible than the market or product-based interpretation of the WTO Panel.³¹ Moreover, although less flexible, the provision has a very uncertain scope.³² Just to give an example, if applied to the often discussed situation of online music file sharing, the concept of commercial activity seems to refer to the idea of making profits, but the concept of "indirect advantage" leaves room for considerable doubt. In these circumstances, would for example the downloading of music on the Internet constitute an indirect

negotiations resulted in detailed provisions on enforcement procedures, these are mostly phrased in a way that makes it obligatory to provide the 'authority' to courts and other enforcement agencies to take certain actions and not actually to oblige certain enforcement actions. Indeed, this part of the TRIPS Agreement has been criticized by some as one of its weakest links".

²⁸ See J.H. Reichman & D. Lange (1998), Bargaining around the TRIPS Agreement: The Case for Ongoing Public-Private Initiatives to Facilitate Worldwide Intellectual Property Transactions, 9 Duke J. Comp. & Int'l L. 1998, 11; P.K. Yu (2011), TRIPS and its Achilles' Heel, 18 J. Intell. Prop. L. 2011, 479.

²⁹ See Council of the European Union, Document No. 12196/11 of 23 August 2011, Anti-Counterfeiting Trade Agreement between the European Union and its Member States, Australia, Canada, Japan, the Republic of Korea, the United Mexican States, the Kingdom of Morocco, New Zealand, the Republic of Singapore, the Swiss Confederation and the United States of America.

³⁰TPP builds on the Trans-Pacific Strategic Economic Partnership Agreement (P4) between Brunei Darussalam, Chile, New Zealand and Singapore, an agreement that entered into force in 2006.

³¹ See in this sense H. Grosse Ruse-Khan (2012), Criminal Enforcement and International IP Law, in C. Geiger (Ed.), Criminal Enforcement of Intellectual Property: A Handbook of Contemporary Research, pp. 171 et seq. For a more detailed discussion, see C. Geiger (2014), The Anti-Counterfeiting Trade Agreement (ACTA) and Beyond: Towards a Differentiated Approach to Criminal Enforcement of Intellectual Property Rights at Global Level, in P. Roffe & X. Seuba (Eds.), The ACTA and the Plurilateral Enforcement Agenda: Genesis and Aftermath, p. 100.

³² See C. Geiger (2012), The Anti-Counterfeiting Trade Agreement and Criminal Enforcement of Intellectual Property: What Consequences for the European Union?, in J. Rosen (Ed.), IP Rights at the Crossroads of Trade, p. 167.

commercial advantage because the user would not buy the originals? And where exactly does commercial activity begin and end? Additionally, Article 23(4) provides that Member States have an obligation to make available under their law criminal procedures and penalties for aiding and abetting, which expands criminal liability to intermediaries and others, going beyond the liability established in the TRIPS Agreement. ACTA also provides for penalties in Article 24 that include "imprisonment as well as monetary fines", thereby requiring cumulating sanctions to all acts of willful trademark counterfeiting or copyright or related rights piracy on a commercial scale.³³

The objective of reaching a tougher international criminal enforcement framework for the infringement of IPRs is also a priority during the ongoing negotiations of another plurilateral treaty, the Trans-Pacific Partnership (TPP) agreement, where it seems that the participating states intend to adopt similar (or even stronger) provisions than ACTA on criminal measures for the protection of intellectual property rights. ACTA on official draft of this treaty has been released to date; nevertheless, a number of leaked versions that are circulating indicate similar patterns to ACTA on the proposed obligation for criminal penalties to include sentences of imprisonment as well as monetary fines. Furthermore, this treaty also proposes to criminalize the aiding and abetting of infringement. At the same time, in the TPP, the proposed provisions that attempt to define the scope of criminal copyright and related rights enforcement aim to include acts of infringement for non-commercial

³³ In light of these various questions and because of the vagueness of the notion of "individual criminalization" and the definition of "commercial scale", there was a strong reaction to ACTA's provisions on criminal enforcement. The European Parliament finally rejected the Agreement on 4 July 2012 with 478 votes against, 39 in favor and 165 abstentions, see European Parliament legislative resolution of 4 July 2012 (12195/2011 – C7-0027/2012 – 2011/0167(NLE)), P7_TA-PROV(2012)0287. Japan, who ratified the agreement in September 2012 is currently the only signatory country to have done so. In order to enter into force, ACTA needs to be ratified by five more countries. For a comment on the rejection and its implications for the future, see D. Matthews & P. Zikovska (2013), The Rise and Fall of the Anti-Counterfeiting Trade Agreement (ACTA): Lessons for the European Union, 44 IIC 2013, 626; R. D'Erme et al. (2013), The Impact of the Anti-Counterfeiting Trade Agreement on the Legal Framework for IP Enforcement in the European Union, in C. Geiger (Ed.), Constructing European Intellectual Property: Achievements and New Perspectives, p. 394.

³⁴ One chapter of the TPP is dedicated to intellectual property. Because of the increasing standard of enforcement measures, the TTP has been qualified as an "ACTA-plus" treaty; see in this sense S.K. Sell (2011), TRIPS Was Never Enough: Vertical Forum Shifting, FTAs, ACTA, and TPP, 18 J. Intell. Prop. L. 2011, 448.

³⁵ See the latest supposed leaked draft of the Agreement of 16 October 2014, available at: https://www.wikileaks.org/tpp-ip3/ (accessed October 2015). Previous versions are dated from February 2011 (for a comment see Flynn et al. (2012), The US Proposal for an Intellectual Property Chapter in the Trans-Pacific Partnership Agreement, 28 Am. U. Int'l L. Rev. 2012, 105) and from August 2013 (for a comment see for example M. Kaminski (2013), The TPP and Copyright, Concurring Opinions of 14 November 2013 and K. Weatherall (2013), TPP – Australian Section-by-Section Analysis of the Enforcement Provisions of the August Leaked Draft.

purposes.³⁶ If this approach is agreed upon, the TTP may bring a broader and higher standard to criminal provisions than the ones previously provided for at the international level.

In addition to the plurilateral arena of intellectual property lawmaking, a frequent vehicle for adopting strong criminal procedures and penalties for violation of intellectual property rights are bilateral treaties, such as free-trade agreements (FTA). For example, the FTAs that the European Commission concludes frequently incorporate criminal sanctions. One example of such FTAs is the one between the European Union and South Korea, which includes a very detailed sub-section on IP criminal enforcement obligations, ³⁷ mandating criminal sanctions at least in cases of willful trademark counterfeiting and copyright and related rights piracy ³⁸ and, as in ACTA, contains an obligation to introduce criminal liability on aiding and abetting. ³⁹ In this regard, the text of the Agreement exceeds the Community *acquis* on the matter. ⁴⁰

This is surprising since there is currently no harmonized framework for the criminal enforcement of intellectual property rights in the European Union. It is subject to national legislation and the introduction of a harmonized standard for criminal procedures and penalties remains very controversial, as the heated debate caused by the proposed Directive on criminal measures has clearly demonstrated, ⁴¹ ultimately leading to its failure and final withdrawal by the European Commission in September 2010. ⁴² One of the most contested provisions defined criminal offenses as "all intentional infringements of an intellectual property right on a *commercial scale*, and attempting, aiding or abetting and inciting such

³⁶ See the supposed leaked draft of the Agreement of 16 October 2014, Article QQ.H.7, available at: https://www.wikileaks.org/tpp-ip2/#start (accessed October 2014). For a comment see M. Kaminski (2014), The Leaked TPP: Some Notes, and Criminal Copyright, Concurring Opinions of 16 November 2014 and K. Weatherall (2014), TPP - Section-by-Section Analysis of Some Provisions People Aren't Talking About (May 2014 leaked draft).

 $^{^{37}}$ Free Trade Agreement between the European Union and its Member States, of the one part, and the Republic of Korea, of the other part, OJ 2011 L 127, 6-1343, Section C, Sub-section B.

³⁸ Article 10.54 of the EU-South Korea FTA.

³⁹ Article 10.57 of the EU-South Korea FTA. See also J. Drexl (2014), Intellectual Property and Implementation of Recent Bilateral Trade Agreements in the EU, in J. Drexl, H. Grosse Ruse-Khan & S. Nadde-Phlix (Eds.), EU Bilateral Trade Agreements and Intellectual Property: For Better or Worse?, p. 271. Interestingly however, the provision on penalties in the FTA seems sounder than those found in ACTA or the proposals in the TPP; it stipulates that "each Party shall provide for penalties that include sentences of imprisonment and/or monetary fines that are effective, proportionate and dissuasive." This provision includes for example the requirement that penalties be proportional to the seriousness of the infringement.

⁴⁰ See also T. Mylly (2014), Constitutional Functions of the EU's Intellectual Property Treaties, in J. Drexl, H. Grosse Ruse-Khan & S. Nadde-Phlix (Eds.), EU Bilateral Trade Agreements and Intellectual Property: For Better or Worse?, p. 242.

⁴¹ Amended Proposal for a Directive of the European Parliament and of the Council on criminal measures aimed at ensuring the enforcement of intellectual property rights, COM(2006) 168 final of 26 April 2006.

⁴²OJEU C 252 of 18 September 2010, p. 9.

infringements". ⁴³ The European Parliament considered this provision too broad and vague and it requested that acts "carried out by private users for personal and not-for-profit purposes" ⁴⁴ should be expressly excluded in order to avoid any ambiguity.

At present, the standards on international criminal procedures and penalties under consideration are thus aiming to expand rather than to restrict the scope of criminal liability as well as the remedies or penalties. Moreover, the guidelines for legislators are not always clear. For instance, the introduction of an international standard on criminal liability for aiding and abetting potentially adds more complexity to the criminal enforcement framework, because the scope and meaning of these notions are different in each country and their doctrine at national level is sometimes unsettled.⁴⁵ The question then arises of how this would affect the national implementation of these international provisions. Moreover, it should be noted that the international legal terminology shifted from "remedies" as used in the TRIPS Agreement to "penalties" in the current concluded or ongoing international treaties. 46 This is important, because while remedies refer to the idea of a loss that an individual must bear if he is found liable for infringement, the concept of criminal "penalties" seems to refer to a punitive rationale. The question remains however whether the punitive character of penalties, such as sentences of imprisonment, should be subject to an international agreement⁴⁷ or whether they should be left solely under the aegis of the national legislature, as criminal law is strongly linked to national particularities.

The appropriate enforcement of intellectual property rights is a legitimate objective. Nevertheless, adopting new (globalized) criminal procedures and penalties, with more detailed and comprehensive rules on criminal offenses, liability and remedies/penalties requires a prior clarification of the standard in Article 61 of the

⁴³ See Article 3 (emphasis added) of the Amended Proposal for a Directive of the European Parliament and of the Council on criminal measures aimed at ensuring the enforcement of intellectual property rights, COM(2006) 168 final of 26 April 2006.

⁴⁴ Position of the European Parliament adopted at first reading on 25 April 2007 with a view to the adoption of Directive 2007/.../EC of the European Parliament and of the Council on criminal measures aimed at ensuring the enforcement of intellectual property rights (EP-PE_TC1-COD (2005)0127).

⁴⁵ This is the case in Australia for example; see K. Weatherall (2012), Submission to the Joint Standing Committee on Treaties Inquiry into the Anti-Counterfeiting Trade Agreement, Submission No. 3, p. 9.

⁴⁶ See Article 61 of the TRIPS Agreement, which reads as follows: "*Remedies* available shall include imprisonment and/or monetary fines sufficient to provide a deterrent" and Article 24 of ACTA, which states that: "each Party shall provide *penalties* that include imprisonment as well as monetary fines sufficiently high to provide a deterrent" (emphasis added).

⁴⁷ See also K. Weatherall (2013), TPP – Australian Section-by-Section Analysis of the Enforcement Provisions of the August Leaked Draft, p. 46.

TRIPS Agreement.⁴⁸ As we have seen, the WTO Panel decision provided for a cautious interpretation of the requirements of Article 61, especially with regard to the definition of "commercial scale".⁴⁹ Therefore, in the next section, the criminal measures will be analysed in light of both the flexibilities provided by the TRIPS Agreement and the place of the Agreement in the international legal order.

3 Exploring Flexibilities for a More Inclusive Interpretation of Criminal Provisions

This section takes a closer look at the norms included in the TRIPS Agreement in order to identify interpretative approaches to the key elements that define the standard on criminal measures under Article 61 of the Agreement. While doing so, it will also analyse the potential impact of general principles of international law, such as the need to understand a rule in light of its function and in the context of the entire legal order.

3.1 Balancing Norms Within the TRIPS Agreement

The TRIPS Agreement, as an international legal instrument that forms part of international public law, must be interpreted according to its objectives. This follows from the rules of treaty interpretation laid down in Articles 31-33 of the Vienna Convention on the Law of Treaties (VCLT) of 23 May 1969, which entered into force on 27 January 1980. These rules are of the same nature as norms of customary international law⁵¹ and are applicable to every state, not only to its

⁴⁸ See for example A. Adam (2011), What is "Commercial Scale"? A Critical Analysis of the WTO Decision in WT/DS362/R, 33 EIPR 2011, 348, who notes that "for the time being, it is not possible to establish a clear and precise standard of criminal enforcement measures based on Art. 61 of the TRIPS Agreement. Consequently, Art. 61 remains an uncertain bare minimum, which may or may not be satisfactory to some parties".

⁴⁹ This interpretation of the provision of Article 61 of the TRIPS Agreement might be regarded as "weak" from the point of view of the richest countries as compared with their IP enforcement standards. In a more global context, the flexibility of the international provision might be seen as an advantage allowing a compromise between the diverging interests of the parties to the Agreement. For a more detailed discussion, see C. Geiger (2012), Weakening Multilateralism in Intellectual Property Lawmaking: A European Perspective on ACTA, 3 WIPO J. 2012, 166; H. Grosse Ruse-Khan (2012), Criminal Enforcement and International IP Law, in C. Geiger (Ed.), Criminal Enforcement of Intellectual Property: A Handbook of Contemporary Research, p. 184.

⁵⁰ UNTS Vol. 1155, 331. However, it is true that some important WTO Members such as the USA have not ratified the Vienna Convention.

⁵¹ See Territorial Dispute (Libyan Arab Jamahiriya/Chad), 4 ICJ Reports 1994, para. 41 of 3 February 1994.

Member States. Additionally, Article 3(2) of the Dispute Settlement Understanding (DSU) provides that the dispute settlement system of the WTO serves "to clarify the existing provisions of those agreements in accordance with customary rules of interpretation of public international law". Thus, the WTO Panels and the Appellate Body are bound to the norms of interpretation as set out in Article 31(1) VCLT. According to this Article, "a treaty shall be interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in light of its object and purpose". Therefore, the WTO Panel, when interpreting Article 61 of the TRIPS Agreement, must use *all* the guiding elements embodied in Article 31(1) VCLT, meaning the good faith principle and the ordinary meaning of the treaty, as well as its context, object and purpose.

The TRIPS Agreement provides for its object and purpose in Articles 7 and 8. Article 7 of the Agreement lays down a principle of balance between rights and obligations and emphasizes that the treaty has the goal of fostering not only economic development, but also social welfare. This means that in interpreting the provisions of the TRIPS Agreement, a single economic perspective cannot be followed exclusively.⁵³ Similarly, Article 8 of the Agreement allows the Member States to adopt measures for the promotion of "the public interest in sectors of vital importance to their socio-economic and technological development". Articles 7 and 8 nevertheless are different in their nature. Article 7 asserts the objectives of intellectual property rights protection, while Article 8 affirms the broad discretion that Member States enjoy in adopting measures for the protection and enforcement of IPRs by also taking into consideration public-interest rationales. 54 Furthermore, the Preamble of the TRIPS Agreement refers to the objective of promoting effective IP but also to the implementation of adequate protection mechanisms, recognizing the "underlying public policy objectives of national systems" and even, for leastdeveloped countries, the needs "in respect of maximum flexibility in the domestic implementation".55

In its report on the *China - Enforcement of Intellectual Property* case, the WTO Panel acknowledged its commitment to the rules of interpretation provided by the

⁵² For a more detailed discussion, see S. Frankel (2006), WTO Application of "The Customary Rules of Interpretation of Public International Law" to Intellectual Property, 46 Va. J. Int'l L. 2006, 365. See also the Doha Declaration on the TRIPS Agreement and Public Health adopted by the Ministerial Conference (WT/Min (01)/DEC2 of 20 November 2001), where it is explicitly stated that in "applying the customary rules of interpretation of international law, each provision of the TRIPS Agreement shall be read in the light of the object and purpose of the Agreement as expressed, in particular in its objectives and principles", Article 5(a).

⁵³ For more details, see H. Grosse Ruse-Khan (2008), A Comparative Analysis of Policy Space in WTO Law, MPI for Intellectual Property, Competition and Tax Law Research Paper Series No 02-02 (reproduced in: A. Kur (2011), Intellectual Property Rights in a Fair World Trade System: Proposals for Reform of TRIPS, p. 167).

⁵⁴ See C.M. Correa (2007), Trade Related Aspects of Intellectual Property Rights: A Commentary on the TRIPS Agreement, p. 108.

⁵⁵ For more details on the Preamble and its impact on the interpretation of the Agreement, see D. Gervais (2003), The TRIPS Agreement: Drafting History and Analysis, para. 2.08.

Vienna Convention.⁵⁶ In considering the concept of "commercial scale" as the core notion when defining the limits of criminal enforcement of intellectual property rights,⁵⁷ the WTO Panel made use of a detailed technical analysis of the ordinary meaning⁵⁸ and the context of the notion.⁵⁹ However, it did not sufficiently consider the object and the purpose of the treaty,⁶⁰ which might be surprising given the legal place of Articles 7 and 8 in the Agreement itself, which should strengthen their role in the interpretation process.⁶¹ As one author rightly noted, "the Panel in effect pays only lip service to interpreting Article 61 'in light of [TRIPS] object and purpose".⁶² Indeed, the Panel only briefly mentions the Preamble of the Agreement,⁶³ without making use in its interpretation exercise of the mechanism provided by the treaty.⁶⁴ In fact, there seems to be a presumption that the provisions of the TRIPS Agreement are drafted in a balanced manner, and that therefore the use of Articles 7 and 8 is not needed.⁶⁵ However, their function is exactly to "recalibrate the

⁵⁶ See Panel Report, China – Measures Affecting the Protection and Enforcement of Intellectual Property Rights, WT/DS362/R, adopted 20 March 2009, DSR 2009:V, p. 2097, p. 80.

⁵⁷ See ibid., p. 79.

⁵⁸ For a critique on the "dictionary" interpretation approach of the ordinary meaning of "commercial scale" see among others A. Adam (2011), What is "Commercial Scale"? A Critical Analysis of the WTO Decision in WT/DS362/R, 33 EIPR 2011, 342; H. Grosse Ruse-Khan (2011), The (Non) Use of Treaty Object and Purpose in Intellectual Property Disputes in the WTO, MPI for Intellectual Property and Competition Law Research Paper Series No. 11–15.

⁵⁹ See Panel Report, China – Measures Affecting the Protection and Enforcement of Intellectual Property Rights, WT/DS362/R, adopted 20 March 2009, DSR 2009:V, p. 2097, p. 84.

⁶⁰ For a more general appraisal of the issue, see H. Grosse Ruse-Khan (2011), The (Non) Use of Treaty Object and Purpose in Intellectual Property Disputes in the WTO, MPI for Intellectual Property and Competition Law Research Paper Series No. 11–15.

⁶¹ See P.K. Yu (2009), The Objectives and Principles of the TRIPS Agreement, 46 Hous. L. Rev. 2009, 979 et seq., who, following other commentators, points out that Article 7 is a "should" provision and is contained in the text of the Agreement and not in the Preamble, which gives it greater weight in the process of interpretation. See also in this sense UNCTAD-ICTSD (2005), Resource Book on TRIPS and Development; D. Gervais (2003), The TRIPS Agreement: Drafting History and Analysis.

⁶² See H. Grosse Ruse-Khan (2012), Criminal Enforcement and International IP Law, in C. Geiger (Ed.), Criminal Enforcement of Intellectual Property: A Handbook of Contemporary Research, p. 182.

⁶³ See Panel Report, China – Measures Affecting the Protection and Enforcement of Intellectual Property Rights, WT/DS362/R, adopted 20 March 2009, DSR 2009:V, p. 2097, paras. 7.530–7.531.
⁶⁴ On the contrary, in another decision, the Panel held that: "Both the goals and the limitations stated in Articles 7 and 8.1 must obviously be borne in mind when doing so as well as those of other provisions of the TRIPS Agreement which indicate its object and purposes" (Panel Report, Canada – Patent Protection of Pharmaceutical Products, WT/DS114/R, adopted 7 April 2000, DSR 2000:V, p. 2289, para. 7.26).

⁶⁵ See for example in this sense the view expressed by the European Commission in ibid., para. 7.25: "[I]n the view of the EC, Articles 7 and 8 are statements that describe the balancing of goals that had already taken place in negotiating the final texts of the TRIPS Agreement. According to the EC, to view Article 30 as an authorization for governments to 'renegotiate' the overall balance of the Agreement would involve a double counting of such socio-economic policies. In particular,

balance"66 between different interests with respect to each provision of the treaty, including those on criminal enforcement.

In the end, when interpreting the provisions on criminal enforcement, the WTO Panel took a market-based approach primarily based on economic rationales. Nevertheless, in determining the flexibility left to the Member States in implementing these provisions, the WTO Panel could also have looked at evidence about the public interest in relation to criminal procedures and penalties, ⁶⁷ as any regulation on criminal law should also serve higher social values. ⁶⁸ This implies that the specific meaning given to the limiting conditions of the notion of "commercial scale" should also reflect its social purposes and that the provision should be read in a manner that includes non-economic objectives, such as for example the protection of human rights. ⁶⁹

Moreover, in the given case, the Panel rightly mentions in its conclusions that it "wishes to emphasize that its findings should not be taken to indicate any view as to whether the obligation in the first sentence of Article 61 of the TRIPS Agreement applies to acts of counterfeiting and piracy committed without any purpose of financial gain". This statement is central in the context of current international intellectual property enforcement lawmaking, especially when reflecting on the possible adoption of a softer understanding of the concept of "commercial scale" with regard to non-profit and private uses of protected content, particularly in order to safeguard privacy and freedom of information in the online world. In this sense, although the TRIPS Agreement does not contain explicit provisions that cover

the EC pointed to the last phrase of Article 8.1 requiring that government measures to protect important socio-economic policies be consistent with the obligations of the TRIPS Agreement. The EC also referred to the provisions of first consideration of the Preamble and Article 1.1 as demonstrating that the basic purpose of the TRIPS Agreement was to lay down minimum requirements for the protection and enforcement of intellectual property rights".

⁶⁶ See D. Borges Barbosa, M. Chon & A. Moncayo von Hase (2007), Slouching Towards Development in International Intellectual Property, 1 Mich. St. L. Rev. 2007, 2013, L. 113.

⁶⁷ See also M. Land (2012), Rebalancing TRIPS, 33 Mich. J. Int'l L. 2012, 460.

⁶⁸ As Robert Howse noted in a comment of the "Canada – Patent Protection of Pharmaceutical Products" decision, the WTO Panel is "only interested in how much the rights holder might lose, not in how much society might gain, from a given exception". See R. Howse (2000), The Canadian Generic Medicines Panel: A Dangerous Precedent in Dangerous Times, 3 J. W. Intell. Prop. 2000, 496. See also C.M. Correa (2007), Trade Related Aspects of Intellectual Property Rights: A Commentary on the TRIPS Agreement, p. 99.

⁶⁹ See in this sense Commission on Human Rights, Report of the High Commissioner on Economic, Social and Cultural Rights: The Impact of the Agreement on Trade-Related Aspects of Intellectual Property Rights on Human Rights, E/CN.4/Sub.2/2001/13 of 27 June 2001, para. 28: "[T]he TRIPS agreement offers significant operational flexibility and the High Commissioner urges Member States of the WTO to use this operational flexibility in ways that would be fully compatible with the promotion and protection of human rights".

⁷⁰ See Panel Report, China – Measures Affecting the Protection and Enforcement of Intellectual Property Rights, WT/DS362/R, adopted 20 March 2009, DSR 2009; V, p. 2097, p. 99.

issues related to the use of copyrighted material online, ⁷¹ Article 61 of the treaty is useful in setting definitional parameters, as it establishes that criminal procedures and penalties are available only in cases of willful commercial infringements. ⁷² In this regard, by justifying its decision through an approach based also on public-interest rationales, the WTO Panel could have produced guidelines on the future application of Article 61 of the Agreement, proposing a definition of "commercial scale" not solely from a strict economic, market-oriented angle, but also with regard to essential social considerations at the heart of IPRs. ⁷³ From this perspective, the TRIPS Agreement could even become an effective instrument to answer some of the challenges posed by various forms of infringement of intellectual property rights in the online world. ⁷⁴

To sum up, the interpretation of the legal concept of "commercial scale" in light of the objectives and purpose of the TRIPS Agreement could support the achievement of an appropriate balance of interests as required by the terms of the treaty. Such a balanced reading can be furthermore supported by general principles of international law which have to be respected when interpreting the provisions of the Agreement. These principles will be analysed now.

3.2 Balancing Mechanisms Rooted in General Principles of International Law

In interpreting the specific provisions of the TRIPS Agreement, the judicial bodies could adopt a more normative reading of the legal text under consideration by

⁷¹ See J.H. Reichman (1995), The Know-How Gap in the TRIPS Agreement: Why Software Fared Badly, and What Are the Solutions, 17 Hastings Comm. & Ent. L.J. 763; J.H. Reichman (1996), Compliance with the TRIPS Agreement: Introduction to a Scholarly Debate, 23 Vand. J. Transnat'l L. 1996, 363; M.A. Hamilton (1996), The TRIPS Agreement: Imperialistic, Outdated, and Overprotective, 29 Vand. J. Transnat'l L. 1996, 613; T. Woods (2009), Copyright Enforcement at all Costs? Considerations for Striking Balance in the International Enforcement Agenda, 37 AIPLA Qu. J. 2009, 347.

⁷² See C.M. Correa (2007), Trade Related Aspects of Intellectual Property Rights: A Commentary on the TRIPS Agreement, p. 449, who states that "infringement that cannot be deemed 'on a commercial scale' (e.g. isolated acts of infringement even if made for profit) is not subject to" Article 61 of the TRIPS Agreement. Another author has also noted that "small-scale piracy should be excluded from the term 'commercial scale', even if done for a financial return"; see D.P. Harris (2008), The Honeymoon is over: The U.S.-China WTO Intellectual Property Complaint, 32 Fordham Int'l L.J. 2008, 142–143.

⁷³ See C. Geiger (2006), "Constitutionalizing" Intellectual Property Law: The Influence of Fundamental Rights on Intellectual Property in Europe, 37 IIC 2006, 371. See also H. Grosse Ruse-Khan (2008), Proportionality and Balancing within the Objectives for Intellectual Property Protection, in P.L.C. Torremans (Ed.), Intellectual Property and Human Rights, Enhanced Edition of Copyright and Human Rights, p. 191.

⁷⁴ For an elaborate analysis on the application of the TRIPS Agreement in the context of "online piracy", see P.L. Judd (2011), Toward a TRIPS Truce, 32 Mich. J. Int'l L. 2011, 649 et seq.

making use of general principles of international law such as the principle of proportionality, ⁷⁵ in order to balance the private rights of the right holders with the obligations of the states to protect and promote public-interest values.

The exact meaning of the principle of proportionality varies. Its application and interpretation depends on the area of law under which it operates, such as European law, public international law or human rights law. However, although the theories advanced on the concept of proportionality might differ in some respects, they are consistent in providing the tools to balance conflicting rights. In this relation, one must emphasize that the legal character of proportionality is that of a "principle", which is different than "rules" because while rules "lay down specific rights and obligations, principles formulate general and flexible imperatives". In this regard, proportionality has become the preferred procedure for balancing interests in various environments. This includes its application in the WTO legal system, as well as its equal relevance in the context of the many acceptable methods of interpretation of the provisions of the TRIPS Agreement.

Applied to the measures set out in Article 61, criminal provisions might be considered disproportionate in circumstances when they go beyond what is necessary to ensure compliance with the rule. Moreover, some prejudices may be justified in light of values deemed superior to the interests of the right holders. This proportionality test recalls the method used to settle conflicts between fundamental rights. ⁸¹ Here, the legislature and the judge applying the test must consider

⁷⁵ Henning Grosse Ruse-Khan has argued for the application of the principle of proportionality to the interpretation of the TRIPS Agreement: H. Grosse Ruse-Khan (2008), Proportionality and Balancing within the Objectives for Intellectual Property Protection, in P.L.C. Torremans (Ed.), Intellectual Property and Human Rights, Enhanced Edition of Copyright and Human Rights, p. 161. See also M. Andenas & S. Zleptnig (2007), Proportionality: WTO Law: In Comparative Perspective, 42 Tex. Int'l L.J. 2007, 373, who however note that: "The main argument advanced against proportionality is that the WTO is institutionally not ready for such a fundamental balancing of values and interests (mainly economic versus non-economic), and that such balancing is at the core of the proportionality analysis".

⁷⁶ See A. Desmedt (2001), Proportionality in WTO Law, 4 J. Int'l Econ. L. 2001, 443.

⁷⁷ For an analysis, see A.S. Sweet & J. Mathews (2008), Proportionality Balancing and Global Constitutionalism, 47 Colum. J. Transnat'l L. 2008, 74.

⁷⁸ See M. Andenas & S. Zleptnig (2007), Proportionality: WTO Law: In Comparative Perspective, 42 Tex. Int'l L.J. 2007, 378.

⁷⁹ See M. Hilf (2001), Power, Rules and Principles – Which Orientation for WTO/GATT Law?, 4 J. Int'l Econ. 2001, L. 112.

⁸⁰ In the WTO law, the principle of proportionality is not mentioned as such; however, it has been convincingly demonstrated that the rules laid down in its Agreements derive from the content of the principle of proportionality. See in more detail M. Andenas & S. Zleptnig (2007), Proportionality: WTO Law: In Comparative Perspective, 42 Tex. Int'l L.J. 2007, 371. See also A. Desmedt (2001), Proportionality in WTO Law, 4 J. Int'l Econ. L. 2001, 441.

⁸¹ See C. Geiger (2006), "Constitutionalizing" Intellectual Property Law: The Influence of Fundamental Rights on Intellectual Property in Europe, 37 IIC 2006, 386; C. Geiger (2009), Copyright's Fundamental Rights Dimension at EU Level, in E. Derclaye (Ed.), Research Handbook on the Future of EU Copyright, p. 27. For such a reasoning on the basis of conflicting fundamental

the justification behind the application of criminal sanctions and come to a differentiated analysis in light of the many interests and fundamental rights at stake.

In this regard, in Europe for instance, an important basis for the application of criminal measures lies in the recognition that intellectual property is a fundamental right, ⁸² as well as in the courts' interpretation of intellectual property rights as property, ⁸³ which, for some, justifies the idea of using criminal sanctions against infringement. ⁸⁴ Therefore, if this approach is adopted, ⁸⁵ the principle of proportionality would imply also taking into account competing fundamental rights, consequently allowing an evaluation of whether the application of criminal sanctions in a specific IP infringement situation is proportional or not. ⁸⁶

rights, see for example the decision of the German Constitutional Court in its School Book decision of 7 July 1971, GRUR 1972, 481.

⁸² Article 17(2) of the Charter of Fundamental Rights of the European Union, 2010 OJEU, C 83/02 of 30 March 2010, provides that "Intellectual property shall be protected".

⁸³ The European Court of Human Rights developed jurisprudence in this sense under Article 1, Protocol 1 of the European Convention for the Protection of Human Rights and Fundamental Freedoms, as amended by Protocols Nos. 11 and 14 of 4 November 1950, ETS 5. For examples, see SC Editura Orizonturi SRL v. Romania, No. 15872/03 of 13 May 2008, ECHR, where it is stated that the right to publish the translation of a novel falls within the scope of Article 1 of Protocol No. 1, para. 70; Balan v. Moldova, No. 19247/03 of 29 January 2008, ECHR, where the Court voted unanimously that there was an interference with the applicant's property rights because the Moldovan courts refused to compensate him for the use made without his consent of a photograph by the Ministry of Internal Affairs; Paeffgen GmbH v. Germany (dec.), Nos 25379/04, 21688/05, 21722/05 and 21770/05 of 18 September 2007, ECHR, on the exclusive right to use and dispose of registered Internet domain names that constitutes a "possession".

⁸⁴ See J. Griffiths (2012), Criminal Liability for Intellectual Property Infringement in Europe: The Role of Fundamental Rights, in C. Geiger (Ed.), Criminal Enforcement of Intellectual Property: A Handbook of Contemporary Research, p. 196, who wonders: "Given this acceptance of the principle that intellectual property rights have fundamental status, can it be argued that European states are obliged to impose effective criminal sanctions against infringement?" See also D. Gervais (2012), Criminal Enforcement in the US and Canada, in C. Geiger (Ed.), Criminal Enforcement of Intellectual Property: A Handbook of Contemporary Research, p. 270.

⁸⁵ Discussing alternatives to the protection of IP at constitutional level by the right to property, see C. Geiger (2015), Implementing Intellectual Property Provisions in Human Rights Instruments: Towards a New Social Contract for the Protection of Intangibles, in C. Geiger (Ed.), Research Handbook on Human Rights and Intellectual Property, p. 661.

⁸⁶ See for example ECtHR, Neij and Sunde Kolmisoppi v. Sweden, No. 40397/12 of 19 February 2013, unreported, where the ECtHR judges state that the criminal conviction of the applicants interferes with their right to freedom of expression protected by Article 10(1) of the ECHR. Nevertheless, within the balancing test of proportionality the Court reiterates "that the nature and severity of the penalties imposed are factors to be taken into account when assessing the proportionality of interference with the freedom of expression guaranteed by Article 10.... In the present case, the Court considers that the prison sentence and award of damages cannot be regarded as disproportionate" (p. 11). For a comment, see C. Geiger & E. Izyumenko (2014), Copyright on the Human Rights' Trial: Redefining the Boundaries of Exclusivity through Freedom of Expression, 45 IIC 2014, 316. See also D. Voorhoof & I. Hoedt-Rasmussen (2013), ECHR: Copyright vs. Freedom of Expression II (the Pirate Bay), Kluwer Copyright Blog of 20 March 2013.

In fact, the interpretation of a given norm needs to take into account the context of the provision within the Agreement⁸⁷ but also within the broader international legal system.⁸⁸ This means that even if the TRIPS Agreement is part of trade law, international obligations resulting from treaties protecting fundamental rights have to be taken into account when interpreting its provisions.⁸⁹ Such an interpretation of TRIPS in light of the international human rights regulations can be drawn from the general law of interpretation of treaties to be found in Article 31 of the VCLT. According to Article 31(3)(c), for the interpretation of a treaty, "any relevant rules of international law applicable in the relations between the parties" should be considered.⁹¹ Hence, given the Member States' obligations in regard to the promotion and protection of human rights, ⁹² international human-rights instruments are relevant rules in the context of the TRIPS Agreement.⁹³

⁸⁷ See in this sense B. Remiche (2007), L'Accord ADPIC, dix ans après: un accord de libre-échange ou d'intégration forcée?, in B. Remiche & J. Kors (Eds.), L'Accord ADPIC, 10 Ans Après: Regards Croisés, Europe-Amérique Latine, p. 533.

⁸⁸ For example, C. McLachlan (2005), The Principle of Systemic Integration and Article 31(3) (c) of the Vienna Convention, 54 Int'l & Comp. L.Q. 2005, 286, states that "the process of interpretation is also an integral part of the legal system in which the text is situated. Legal texts only make sense within the context of the system that gives them authority and meaning. By the same token, the process of legal interpretation itself performs an integrating task within the legal system".

⁸⁹ On the interaction between IP and international human rights provisions, see L.R. Helfer (2006), Three Approaches for Reconciling Human Rights and Intellectual Property Rights, in ALADDA (Ed.), Copyrights and Freedom of Expression, p. 116. According to this author, it is certain "that the rules, institutions, and discourse of international human rights are now increasingly relevant to intellectual property law and policy and that the two fields, once isolated from each other, are becoming even more closely intertwined". In this sense, see also L.R. Helfer (2007), Toward a Human Rights Framework for Intellectual Property, 40 U.C. Davis L. Rev. 2007, 971; P.K. Yu (2007), Reconceptualizing Intellectual Property Interests in a Human Rights Framework, 40 U.-C. Davis L. Rev. 2007, 1039; P.K. Yu (2007), Ten Common Questions about Intellectual Property and Human Rights, 23 Ga. St. U. L. Rev. 2007, 709; N. Bronzo (2007), Propriété Intellectuale et Droits Fondamentaux; C. Geiger (Ed.), Research Handbook on Human Rights and Intellectual Property.

⁹⁰ See S. Frankel (2006), WTO Application of "The Customary Rules of Interpretation of Public International Law" to Intellectual Property, 46 Va. J. Int'l L. 2006, 420, underling that "Art. 31(3) (c) is not limited to rules in relation to intellectual property law, but all rules of international law" and that therefore the "open-textured nature of some TRIPS Agreement carve-outs may call for other areas of international law to be treated as part of the context of interpretation".

⁹¹ Article 31(3)(c) VCLT however is reserved for cases where the ordinary meaning of the terms (Article 31(1) VCLT) does not necessarily provide the answer. See in this sense C. McLachlan (2005), The Principle of Systemic Integration and Article 31(3)(c) of the Vienna Convention, 54 Int'l & Comp. L.Q. 2005, 311: "[I]t is always essential to keep in mind that Article 31(1)(c) is only part of a larger interpretation process, in which the interpreter must first consider the plain meaning of the words in their context and in the light of the object and purpose of the provision".

⁹² See Office of the High Commissioner for Human Rights, "Human Rights and Trade", Submis-

⁹² See Office of the High Commissioner for Human Rights, "Human Rights and Trade", Submission to the 5th WTO Ministerial Conference, Cancun, Mexico, 10-14 September 2003, p. 4.

⁹³ See in this sense the Commission on Human Rights, Report of the High Commissioner on Economic, Social and Cultural Rights: The Impact of the Agreement on Trade-Related Aspects of

The extent to which the WTO bodies need to take into account international human rights law when interpreting the provisions of the TRIPS Agreement has however been subject to debate. ⁹⁴ It is true that WTO Panels have traditionally been reluctant to consider laws outside the WTO system. ⁹⁵ Nevertheless, there cannot be much doubt that the interpretation of trade rules must be consistent with concurrent human-rights obligations when these norms are relevant. Such international obligations result from the legally binding International Covenant on Civil and Political Rights (ICCPR) ⁹⁶ and the International Covenant on Economic, Social and Cultural Rights (ICESCR), ⁹⁷ both of 1966, which build on the content of the Universal Declaration of Human Rights (UDHR) of 1948. ⁹⁸ For some scholars and human rights institutions, there is even a primacy of international human-rights instruments over trade-liberalization provisions, making it mandatory that these rules be interpreted in light of international human-rights obligations. ⁹⁹ The UN

Intellectual Property Rights on Human Rights, E/CN.4/Sub.2/2001/13 of 27 June 2001, para. 16: "the overall thrust of the TRIPS Agreement is the promotion of innovation through the provision of commercial incentives. The various links with human rights' subject matter – the promotion of public health, nutrition, environment and development – are generally expressed in terms of exceptions to the rule rather than the guiding principles themselves and are made subject to the provisions of the Agreement". See also H. Hestermeyer (2007), Human Rights and the WTO: The Case of Patents and Access to Medicines, pp. 103-104, explaining that "the WTO is therefore bound by general international law standards of human rights to the extent that WTO law is not contradicting them, implicitly contracting out of them. In case of a contradiction the WTO remains bound by human rights standards where those have acquired that status of jus cogens".

 $^{^{94}}$ On this see C.M. Correa (2007), Trade Related Aspects of Intellectual Property Rights: A Commentary on the TRIPS Agreement, p. 100.

⁹⁵ See on this M. Land (2012), Rebalancing TRIPS, 33 Mich. J. Int'l L. 2012, 472.

⁹⁶ UN General Assembly, International Covenant on Civil and Political Rights (ICCPR) of 16 December 1966, UNTS, Vol. 999.

⁹⁷ UN General Assembly, International Covenant on Economic, Social and Cultural Rights (ICESCR) of 16 December 1966, UNTS, Vol. 993.

⁹⁸ UN General Assembly, Universal Declaration of Human Rights (UDHR) of 10 December 1948, 217 A (III). The UDHR is a resolution of the General Assembly of the United Nations with no binding character. At the same time, there is an extensive doctrine on the legal effects that the UDHR has obtained, especially as an instrument which is part of customary international law. For a discussion see H. Hannum (1995–1996), The Status of the Universal Declaration of Human Rights in National and International Law, 25 Geo. J. Int'l L. 1995–1996, 287; R. Smith (2015), Interactions between International Human Rights Law and the European Legal Order, in C. Geiger (Ed.), Research Handbook on Human Rights and Intellectual Property, p. 52 et seq. See also H. Hestermeyer (2007), Human Rights and the WTO: The Case of Patents and Access to Medicines, pp. 119 et seq.

⁹⁹ See the article of G. Marceau (2002), WTO Dispute Settlement and Human Rights, 13 EJIL 2002, 753 et seq.; G. Marceau (2005), The WTO Dispute Settlement and Human Rights, in F.M. Abbott, C. Breining-Kaufmann & T. Cottier (Eds.), International Trade and Human Rights: Foundations and Conceptual Issues, p. 181; R. Howse & M. Mutua (2000), Protecting Human Rights in a Global Economy: Challenges for the World Trade Organization, arguing "that trade and human rights regimes need not be in conflict, so long as the trade regime is interpreted and applied in a manner consistent with the human rights obligations of states. This interpretation respects the hierarchy of norms in international law, where human rights, to the extent that they

Sub-Commission on Human Rights in its resolutions has on several occasions urged the World Trade Organization in general, and the Council on TRIPS in particular, "to take fully into account the existing State obligations under international human rights instruments". Likewise, in its report on the impact of globalization on human rights, the High Commissioner called for a human rights approach when liberalizing trade in order to balance economic and social imperatives. ¹⁰¹ In fact, international trade law is complementary to human rights norms and vice versa. As Robert Anderson and Hannu Wager have rightly stated, "it remains that efficiently functioning markets, backed up by appropriate laws and institutions, are central to any realistic programme for development and hence to the fulfillment of human rights". ¹⁰²

Therefore, when interpreting the notions of "wilful trademark counterfeiting or copyright piracy on a commercial scale", the WTO Panel needs to comply with its Member States' human rights obligations 103 and "give content to ambiguous provisions that require consideration of context". 104 As seen previously, such a reading of the TRIPS Agreement would find support in the wording of Article 8 of the treaty, as the application of the enforcement provisions also needs to serve public interest objectives. 105

have status of preemptory norms, will normally prevail over specific, conflicting provisions of any treaties including trade agreements".

¹⁰⁰See Sub-Commission on Human Rights, Intellectual Property Rights and Human Rights, E/CN.4/SUB.2/RES/2000/7 of 17 August 2000; Sub-Commission on Human Rights, Intellectual Property and Human Rights, E/CN/4/SUB.2/RES/2001/21 of 16 August 2001.

¹⁰¹ See Commission on Human Rights, Report of the High Commissioner for Human Rights: Globalization and Its Impact on the Full Enjoyment of Human Rights, E/CN.4/2002/54 of 15 January 2002, para. 10: "While the WTO agreements provide a legal framework for the economic aspects of the liberalization of trade, the norms and standards of human rights balance this by offering a legal framework for the social dimensions of trade liberalization".

¹⁰² See R.D. Anderson & H. Wager (2006), Human Rights and the WTO: The Cases of Intellectual Property and Competition Policy, 9 J. Int'l Econ. L. 2006, 715.

¹⁰³ One author has noted: "The WTO is called upon to provide a stable and reliable framework for international trade. This presupposes that the system is accepted by all WTO Members and the relevant actors on the national level. The WTO is designed to evolve according to basic constitutional principles which are enriched in the rule of law and in the principle of legitimate government pursuing the protection of social values as well as fundamental rights. Therefore the dispute settlement bodies under the WTO try not to depart from fundamental legal principles as laid down in the respective constitutional systems of WTO Members. Individuals will only give their continuing support to a system which they see as legitimate and which respects such fundamental legal principles". See M. Hilf (2001), Power, Rules and Principles – Which Orientation for WTO/GATT Law? 4 J. Int'l Econ. L. 2001, 125.

¹⁰⁴ See M. Land (2012), Rebalancing TRIPS, 33 Mich. J. Int'l L. 2012, 472.

¹⁰⁵ See also M. Land (2012), Rebalancing TRIPS, 33 Mich. J. Int'l L. 2012, 472 et seq. For a detailed analysis of Article 8 of the TRIPS Agreement, see for example C.M. Correa (2007), Trade Related Aspects of Intellectual Property Rights: A Commentary on the TRIPS Agreement, pp. 103 et seq.

To summarize, insofar as human rights have a threefold purpose, namely: to recognize Member States' international human rights obligations, to strengthen the legitimacy of the interpretative process¹⁰⁶ and equally to implement a balancing mechanism when determining the scope of criminal enforcement measures, ¹⁰⁷ they should inform the interpretation of the provisions of the TRIPS Agreement. Furthermore, it is obvious from the requirements of the terms of the Agreement that the WTO Panel is bound by the balancing provisions incorporated in the treaty itself, which must be considered in the interpretative method of every individual provision, including those on criminal procedures and penalties. Therefore, the text of the Agreement allows interpretation of broad and ambiguous notions such as "commercial scale" against international human rights obligations. It also requires the Panel to apply the principle of proportionality. These tools of interpretation might not necessarily lead to a different result than the one reached by the WTO Panel when interpreting the provisions on criminal enforcement. As we have seen, the Panel's reading has led to a flexible understanding of the existing framework and thus to a satisfying solution. It is rather the legitimacy of the interpretative result that is at stake. ¹⁰⁸ In fact, it should always be recalled that applying criminal law in the field of intellectual property (as in any other field) is a matter of public and not solely private interest. ¹⁰⁹ So far, however, when taking into consideration flexibilities of the treaty or when using a normative interpretation, the approach of the WTO Panel has remained above all economic, ignoring the broader and potentially relevant social or ethical issues.

Anyhow, given the fact that criminal enforcement is of such relevance in the current debates on intellectual property, it might be necessary to go one step further and to evaluate the appropriateness of the existing international legal framework. With this in mind, the next section will reflect on the need for a revision of the main requirements for criminalization of intellectual property infringement.

¹⁰⁶ See also in this sense M. Land (2012), Rebalancing TRIPS, 33 Mich. J. Int'l L. 2012, 472.

¹⁰⁷ See as well H. Grosse Ruse-Khan (2008), Proportionality and Balancing within the Objectives for Intellectual Property Protection, in P.L.C. Torremans (Ed.), Intellectual Property and Human Rights, Enhanced Edition of Copyright and Human Rights, p. 191.

¹⁰⁸ See also H. Grosse Ruse-Khan (2012), Criminal Enforcement and International IP Law, in C. Geiger (Ed.), Criminal Enforcement of Intellectual Property: A Handbook of Contemporary Research, p. 183: "Hence it is not the interpretative result which is subject to criticism. Instead, it is the systemic problem of not taking the object and purpose of TRIPS seriously in the process of treaty interpretation".

¹⁰⁹ See C. Geiger (2014), The Rise of Criminal Enforcement of Intellectual Property Rights . . . and its Failure in the Context of Copyright Infringements on the Internet, in S. Frankel & D. Gervais (Eds.), The Evolution and Equilibrium of Copyright in the Digital Age, p. 113; C. Geiger (2014), The Anti-Counterfeiting Trade Agreement (ACTA) and Beyond: Towards a Differentiated Approach to Criminal Enforcement of Intellectual Property Rights at Global Level, in P. Roffe & X. Seuba (Eds.), The ACTA and the Plurilateral Enforcement Agenda: Genesis and Aftermath, p. 100.

4 Conceiving a Balanced Legal Framework for Criminal Enforcement of Intellectual Property Rights

As we have seen, Article 61 of the TRIPS Agreement provides for flexible mechanisms that allow Member States to implement the provisions on criminal procedures and penalties according to their domestic needs. We have also seen that the existing interpretation by the WTO Panel decisions should not be the only point of reference for national legislatures or judges when construing international intellectual property law, and that other perspectives or norms have to be taken in to account. The problem is that due to the current international intellectual property agenda, within which certain countries try to systematically push for new and higher criminal enforcement standards, it is unlikely that the proposed balanced understanding of the criminal provisions of IP protection will prevail. This invites reflection on the desirability of a revision of the existing framework in order to create adequate, binding and efficient enforcement measures, while at the same time taking into account the public interest and basic principles of justice such as proportionality, legal certainty, procedural justice and more generally the protection of fundamental rights.

When developing new criteria for the criminal enforcement of intellectual property rights, one obvious challenge is to guarantee compatibility between the flexibility requirement when formulating the terms of international law (in order to leave enough room for maneuver to Member States to implement these norms in accordance with their national circumstances) and the condition that the law should comply with the principle of legal certainty, especially in the area of criminal procedures and penalties. In fact, the theoretical principle of legal certainty provides for sophisticated requirements that have practical applications in various fields, which are not possible to address in detail within the limits of this chapter. For our aim, it suffices to underline a few major difficulties that emerge in relation to legal certainty, particularly on the prerequisites of predictability and legality of any rule of law. In the criminal context in particular, the principle of legal certainty

¹¹⁰ There are various initiatives, especially in academic forums, to propose alternative perspectives. See for example "Washington Declaration on Public Interest"; "Max Planck Principles on Bilateral and Regional Agreements". For a comment on the latter, specifically on how to apply this set of principles to recent international intellectual property instruments, see J. De Beer (2013), Applying Best Practice Principles to International Intellectual Property Lawmaking, 44 IIC 2013, 884.

¹¹¹ See in this sense in the copyright context K. Gracz (2013), On the Role of Copyright Protection in the Information Society, Anti-ACTA Protests in Poland as a Lesson in Participatory Democracy, 4 JIPITEC 2013, 21.

¹¹²Legal certainty has been the subject of vast research. See for example T. Tridimas (1999), The General Principles of EC Law; R. Alexy (2002), A Theory of Constitutional Rights; F. Hayek (1976), Law, Legislation and Liberty Vol. 2; V. Held (1970), The Public Interest and Individual Interests; J. Rawls (1999), A Theory of Justice; J. Habermas (1998), Between Facts and Norms: Contributions to a Discourse Theory of Law and Democracy.

is a minimum requirement for any provision, ¹¹³ which means that individuals must have a clear understanding of the intent of the law and the corresponding criminal penalties. ¹¹⁴ In this sense, the principle of legal certainty mandates that offenses and the relevant penalties must be clearly defined by law ¹¹⁵ and prohibits a broad interpretation of criminal provisions. ¹¹⁶ This is significant especially with regard to copyright, where the complexity of the existing rules on its protection and enforcement can make it difficult for individuals to comprehend the lawful conduct they should adopt. ¹¹⁷ In this relation, as previously mentioned, some of the recent attempts to strengthen criminal measures aim to provide sanctions for commercial activities which bring an "indirect economic advantage". ¹¹⁸ Such a broad concept of commercial scale raises serious difficulties since most regional or national legislations do not provide a legal definition of the term, ¹¹⁹ and therefore courts are likely to understand the requirement in different ways. ¹²⁰ Such a definition at the international level, ambiguous in scope, is thus highly problematic with regard to the principles of legal certainty and the legality of criminal offenses. ¹²¹

¹¹³ The principle of legal certainty can be found in relevant international and European norms such as in Article 15 ICCPR; Article 49(1) EU Charter of Fundamental Rights; Article 7 ECHR.

¹¹⁴ For example, the European Court of Human Rights considers carefully the predictability criterion; see Rekvenyi v. Hungary, No. 25390/94 of 20 May 1999, ECHR, para. 34, Reports of Judgments and Decisions 1999-III.

¹¹⁵ See Camilleri v. Malta, No. 42931/10 of 22 January 2013, para. 34, unreported.

¹¹⁶ See Scoppola v. Italy (No. 2), No. 10249/03 of 17 September 2009, para. 93, unreported.

¹¹⁷ See also D. Gervais (2012), Criminal Enforcement in the US and Canada, in C. Geiger (Ed.), Criminal Enforcement of Intellectual Property: A Handbook of Contemporary Research, p. 269.
¹¹⁸ See Article 23 ACTA or the proposed provision on criminal enforcement in the TPP, as discussed in Sect. 2.

¹¹⁹See at the European Union level Recital (14) of the Directive 2004/48/EC of the European Parliament and of the Council of 29 April 2004 on the enforcement of intellectual property rights, OJEU, L 157 of 30 April 2004, corrected in OJEU L 195 of 2 June 2004. See also for national regulations of the Member States of the European Union on the matter Commission Staff Working Document, Analysis of the application of Directive 2004/48/EC of the European Parliament and the Council of 29 April 2004 on the enforcement of intellectual property rights in the Member States, Brussels, 22 December 2010, SEC(2010) 1589 final, 9. For a brief survey on criminal intellectual property laws in different jurisdictions around the world, including on the notion of "commercial scale", see also D.P. Harris (2008), The Honeymoon is over: The U.S.-China WTO Intellectual Property Complaint, 32 Fordham Int'l L.J. 2008, 2013, 146–156.

¹²⁰ See for example the decision of the Supreme Court of Estonia of 14 January 2013, case No. 3-1-1-112-12, where the Court acquitted an individual convicted for copyright infringement by two courts in lower instances. The Estonian Supreme Court argued that "commercial scale" cannot be interpreted broadly, and that intention is not sufficient in order to satisfy the threshold of financial gain or commercial purposes of the infringing acts, which should be systematic or repetitive in nature.

¹²¹ In the European Union, the Court of Justice has repeatedly stated that "the principle of the legality of criminal offences and penalties implies that Community rules must define clearly offences and the penalties which they attract". The CJEU has further emphasized that the principles of legal certainty and legality of criminal offenses and penalties are "satisfied where the individual can know from the wording of the relevant provision and, if need be, with the

In this context, it is also relevant to recall that certain aspects of human rights are closely related to the principle of legal certainty. Many conditions established by courts and human rights bodies with regard to this principle are applicable in the context of criminal enforcement of IP, because of the possible infringement of fundamental rights that might result from the potentially disproportionate nature of criminal penalties and procedures. In this regard, for example, a central condition under constant evaluation by the specialized courts is that any interference with the rights covered by human rights instruments must be "in accordance with the law". 122 The European Court of Human Rights has for instance developed a qualitative assessment for interpreting this requirement, ¹²³ establishing that the scope of the rule of law should be clear and detailed in order to avoid arbitrary interference by the judiciary. 124 Likewise, an important sphere of the principle of legal certainty is the deprivation of liberty. 125 In most jurisdictions, imprisonment remains the most severe penalty for unlawful conduct and is directly connected to the international fundamental right of personal liberty and security. 126 It has been understood that deprivation of liberty can be imposed only if "it is necessary to meet a pressing societal need and in a manner proportionate to that need". 127 To this effect, disproportionate criminal penalties are prohibited, ¹²⁸ which means that criminal sanctions should reflect the gravity of a crime. This extends to how

assistance of the courts' interpretation of it, what acts and omissions will make him criminally liable". ECJ, Case C-308/06, International Association of Independent Tanker Owners (Intertanko) and Others v. Secretary of State for Transport, Judgment of the Court (Grand Chamber) of 3 June 2008, ECR I-04057, para. 71.

¹²² The phrase is covered for example by Article 8(2) ECHR: "There shall be no interference by a public authority with the exercise of this right except such as is in accordance with the law and is necessary in a democratic society". See also for a discussion X. Seuba (2015), Human Rights and Intellectual Property Law at Bilateral and Multilateral Levels: Substantive and Operational Aspects, in C. Geiger (Ed.), Research Handbook on Human Rights and Intellectual Property.

¹²³ In Kruslin v. France, No. 11801/85 of 24 April 1990, ECHR, para. 27, the European Court of Human Rights established that "the impugned measure should have some basis in domestic law; it also refers to the quality of the law in question, requiring that it should be accessible to the person concerned, who must moreover be able to foresee its consequences for him, and compatible with the rule of law".

¹²⁴ See in this sense Weber and Saravia v. Germany, No. 54934/00 of 29 June 2006, ECHR, paras. 93-95, and Liberty and others v. the United Kingdom, No. 58243/00 of 1 July 2008, para. 63.

 $^{^{125}\,\}mathrm{See}$ in this sense Novik v. Ukraine, No. 48068/06 of 18 March 2009, ECHR, para. 19, unreported.

¹²⁶See Article 9(1) ICCPR, corresponding at international level to the standards in Article 9 UDHR. At the regional level see Article 5(1) ECHR; Article 6 EU Charter of Fundamental Rights; Article 7(3) of the American Convention on Human Rights (ACHR) or Article 6 of the African Charter on Human and Peoples' Rights.

¹²⁷ See Commission on Human Rights, Report of the Working Group on Arbitrary Detention, Chairperson-Rapporteur, Leila Zerrougui: Civil and Political Rights, Including the Question of Torture and Detention, E/CN.4/2006/7, 12 December 2005, para. 63.

¹²⁸ Article 49(3) of the EU Charter of Fundamental Rights reads as follows: "The severity of penalties must not be disproportionate to the criminal offence". See for a comment J. Griffiths

penalties are determined and what sanctions may be imposed. In the current climate, in which international standards on criminal penalties are set forth to include "imprisonment as well as monetary fines", without a clear differentiation between forms of infringement or between types of infringers, the fundamental guarantee of legality and the proportionality of sanctions in criminal proceedings might not be met.

Since "commercial scale" is a primary criterion in establishing the level of criminal sanctions for intellectual property rights infringement, this central notion for applying criminal sanctions should be precise and clear. However, the Max Planck Institute for Innovation and Competition has emphasized that the concept of "commercial scale" is too vague to adequately define the elements of the offense and has proposed more restrictive criteria, such as the "need for an intention to make profits". ¹²⁹ One might even go further and legitimately ask whether this essentially economic criterion is truly appropriate for deciding what should be punished or not: Should it not rather be the aggravated social harm of the infringement that should be taken into account? ¹³⁰ The necessity of criminal sanctions against infringement for cases such as counterfeited medicines that affect the public interest (especially public health) is rather obvious. However, it is far less evident in certain areas of copyright infringement, especially in the context of personal or private uses. ¹³² When designing an appropriate standard for criminal

^{(2015),} Enforcement of Intellectual Property Rights and the Right to a Fair Trial, in C. Geiger (Ed.), Research Handbook on Human Rights and Intellectual Property.

¹²⁹ See R.M. Hilty, A. Kur & A. Peukert (2006), Statement of the MPI for Intellectual Property, Competition and Tax Law on the Proposal for a Directive of the European Parliament and the Council on Criminal Measures Aimed at Ensuring the Enforcement of Intellectual Property Rights, 37 IIC 2006, 970.

¹³⁰ See in this spirit the European Court of Human Rights, reiterating that in order to make an act a criminal offense, there has to be evidence to justify that "the act has been injurious to moral standard" in a given society or that there has been some "public demand for stricter enforcement of the law". See Dudgeon v. the United Kingdom, No. 7525/76 of 22 October 1981, para. 60. See also C. Geiger (2014), The Anti-Counterfeiting Trade Agreement (ACTA) and Beyond: Towards a Differentiated Approach to Criminal Enforcement of Intellectual Property Rights at Global Level, in P. Roffe & X. Seuba (Eds.), The ACTA and the Plurilateral Enforcement Agenda: Genesis and Aftermath, p. 100.

¹³¹ See in this sense D. Lefranc (2012), Historical Perspective on Criminal Enforcement, in C. Geiger (Ed.), Criminal Enforcement of Intellectual Property: A Handbook of Contemporary Research, p. 126, stating: "We should strive to maintain an overall coherence of both civil and criminal sanctions. The principle of such penalties does not appear to be debatable. Their severity though is controversial".

¹³² See M. Bitton (2013), Rethinking the Anti-Counterfeiting Trade Agreement's Criminal Copyright Enforcement Measures, 102 J. Crim. Law Criminol. 2013, 77. See also G.S. Moohr (2003), The Crime of Copyright Infringement: An Inquiry based on Morality, Harm and Criminal Theory, 83 B.U. L. Rev. 2003, 778: "Criminal theory explains that criminal sanctions are appropriate when conduct is harmful to the community or when it offends notions of morality. The present inquiry into the harm and morality of copyright infringement indicates that neither principle provides robust support for treating infringement as a crime, especially for personal use infringement".

enforcement of IPRs, it should thus always be kept in mind that criminal law is a tool to protect the public interest, the harm to society being the justification for the existence of a criminal penalty.¹³³

To sum up, we have seen that when designing an appropriate legal framework for the criminal enforcement of intellectual property rights, it is necessary to take into consideration requirements rooted in the principle of legal certainty, such as predictability and legality. At the same time, fundamental rights have equally to be taken into account to secure public interest rationales within the IP system. In this context, it is generally acknowledged that punitive sanctions have a greater impact on individual freedoms than the preventive character of a civil liability. Therefore, any revised international framework will have to provide for an extremely cautious approach towards criminal sanctions in cases of intellectual property rights infringements, keeping in mind two imperatives: the wrongdoing should likely be of greater magnitude than one leading to civil liability and its result must be an aggravated social harm for the community. Admittedly, as we have seen, this is not the direction taken in recent initiatives; In fact, it is quite the contrary.

¹³³ See for example A. Wechsler (2012), Criminal Enforcement of Intellectual Property Law: An Economic Approach, in C. Geiger (Ed.), Criminal Enforcement of Intellectual Property: A Handbook of Contemporary Research, p. 150; and G.S. Moohr (2003), The Crime of Copyright Infringement: An Inquiry based on Morality, Harm and Criminal Theory, 83 B.U.L. Rev. 2003, 747, who also notes: "When the legal standard is evolving and a community norm is not yet in place, criminal penalties offend notions of due process, fairness, and commonly held ideas about notice and legality", p. 776.

¹³⁴See also X. Seuba (2015), Human Rights and Intellectual Property Law at Bilateral and Multilateral Levels: Substantive and Operational Aspects, in C. Geiger (Ed.), Research Handbook on Human Rights and Intellectual Property.

¹³⁵ See P.K. Yu (2011), The TRIPS Enforcement Dispute, 89 Neb. L. Rev. 2011, 2013, L. 1114; K. Gracz (2013), On the Role of Copyright Protection in the Information Society, Anti-ACTA Protests in Poland as a Lesson in Participatory Democracy, 4 JIPITEC 2013, 21. For example, in the European Union, the Proposal for a Directive of the European Parliament and of the Council on the protection of undisclosed know-how and business information (trade secrets) against their unlawful acquisition, use and disclosure, COM(2013) 813 final, Brussels, 28 November 2013, contains both in its Recitals and in the body of the text important safeguards based in fundamental rights, such as in Recitals 14 (fair trial) and 23 (fundamental rights), and also Articles 10 and 12 (fundamental rights and freedom of expression).

¹³⁶See for example the decision of the US Supreme Court in Reno v. American Civil Liberties Union, 521 US 844 (1997), para. 872.

¹³⁷ According to T. Hardy (2002), Criminal Copyright Infringement, 11 William and Mary Bill of Rights Journal 2013, L. 311, "[d]istinctions between criminal law and civil law usually emphasize the greater magnitude or scope of the wrongdoing addressed by the former over the latter. In particular, the justification for wrongdoing to be a matter of the state's interest is that the activity is egregious enough to affect or offend the entire community".

¹³⁸ See for example G.S. Moohr (2003), The Crime of Copyright Infringement: An Inquiry based on Morality, Harm and Criminal Theory, 83 B.U. L. Rev. 2003, 778: "Even after setting aside the significant problems in measuring the losses of copyright holders, harm caused by copying for personal use differs from that caused by competitive infringers or by those who facilitate infringement for commercial purposes".

5 Conclusion

A balanced international legal framework for the criminal enforcement of intellectual property rights is needed to secure public support. The current norms on criminal remedies under Article 61 of the TRIPS Agreement are almost exclusively based on economic rationales. This has also been confirmed by the WTO Panel decision in the *China - Enforcement of Intellectual Property* case. While the Panel adopted a flexible and differentiated approach to the interpretation of these provisions, its argumentation failed to take sufficiently into account non-economic factors and public-interest rationales. This is not entirely surprising: though WTO judicial bodies are in principle equipped to take into consideration matters of public interest in their interpretative process, history shows that they have rarely made use of such tools in the context of TRIPS, and even when this has been the case, they have focused almost entirely on the perspective of private right holders. ¹³⁹ By doing so, the Panel ignores the fact that the text of the Agreement has to be interpreted in light of its objectives and that a normative interpretation is mandated by human-rights obligations.

Therefore, a revision of the legal framework provided by the TRIPS Agreement for the criminal enforcement of intellectual property rights should be contemplated. As we have seen, such a revision will need to operate a shift from purely economic or market-based justifications towards a better respect of social rationales, using indicators such as legality, fairness, proportionality and more generally human-rights compliance. For this purpose and in order to find broad support, ¹⁴⁰ it will be crucial that the criminal provisions reflect the public-interest objectives that they want to achieve and that the sanctions envisaged are differentiated according the social harm caused by the infringement. Such a design of a new set of balanced norms for criminal enforcement might guarantee that, in the long run, the intellectual property regime will not be rejected by the vast majority ¹⁴¹ and that criminal

¹³⁹ See in this sense R.L. Okediji (2003), Public Welfare and the Role of the WTO: Reconsidering the TRIPS Agreement, 17 Emory Int'l L. Rev. 2003, 819; H. Grosse Ruse-Khan (2011), The (Non) Use of Treaty Object and Purpose in Intellectual Property Disputes in the WTO, MPI for Intellectual Property and Competition Law Research Paper Series No. 11–15, p. 433; M. Land (2012), Rebalancing TRIPS, 33 Mich. J. Int'l L. 2012, 433.

¹⁴⁰As one author underlines, "whether the society respects given law and obeys particular legal norms depends not only on the normative reality, but also on the way in which the society *perceives* the particular branch of law. What the general public thinks the law says and how it apprehends respective legal acts is equally important for the internalization of the legal norms as what the law actually says. The importance of the image of law originates in the fact that both legal and social norms, as well as the process of their internalization, are social facts" (see K. Gracz (2013), On the Role of Copyright Protection in the Information Society, Anti-ACTA Protests in Poland as a Lesson in Participatory Democracy, 4 JIPITEC 2013, 26 et seq. (emphasis in original). ¹⁴¹ See also I.D. Manta (2011), The Puzzle of Criminal Sanctions for Intellectual Property Infringement, 24 Harv. J.L. & Tech. 2011, 469, who states that "there is a danger of overly harsh sanctions and individuals' loss of respect for copyright and criminal law generally if, given the widespread culture of file-sharing, the law is perceived as criminalizing 'everybody'".

sanctions are applied only to those types of behavior that are causing serious threats to society. ¹⁴² Revising the current framework might also have economic benefits, as the costs of combating counterfeiting in certain sectors through criminal sanctions often outweigh the limited results. ¹⁴³ Unfortunately, such an approach on criminal enforcement, taking into account not solely economic, but also ethical, historical and psychological aspects, ¹⁴⁴ does not seem to be addressed by the TRIPS-plus treaties recently concluded or currently under negotiation. It is therefore to be hoped that the celebration of the 20th anniversary of the TRIPS Agreement will be the opportunity to reflect on the design of a proper international legal order for the enforcement of intellectual property.

References

Adam, A. (2011), What is "Commercial Scale"? A Critical Analysis of the WTO Decision in WT/DS362/R, 33 EIPR 2011, 342, London: Sweet & Maxwell

Alexy, R. (2002), A Theory of Constitutional Rights, Oxford: Oxford University Press

Andenas, M. & Zleptnig, S. (2007), Proportionality: WTO Law: In Comparative Perspective, 42 Tex. Int'l L.J. 2007, 371, Austin, TX: UT Law Publications

Anderson, R.D. & Wager, H. (2006), Human Rights and the WTO: The Cases of Intellectual Property and Competition Policy, 9 J. Int'l Econ. L. 2006, 707, Oxford: Oxford University Press

Bitton, M. (2013), Rethinking the Anti-Counterfeiting Trade Agreement's Criminal Copyright Enforcement Measures, 102 J. Crim. Law Criminol. 2013, 67, Chicago: Northwestern University School of Law

Borges Barbosa, D., Chon, M. & Moncayo von Hase, A. (2007), Slouching Towards Development in International Intellectual Property, 1 Mich. St. L. Rev. 2007, 71, East Lansing: Michigan State University College of Law

Bronzo, N. (2007), Propriété Intellectuelle et Droits Fondamentaux, Paris: L'Harmattan

¹⁴² In this sense, during the TRIPS Agreement negotiations, India and Hong Kong suggested that only infringements that have harmed the interests of society or that pose a threat to society, and not merely those of a private party, should be criminalized. See A. Adam (2011), What is "Commercial Scale"? A Critical Analysis of the WTO Decision in WT/DS362/R, 33 EIPR 2011, 346.

¹⁴³See in this sense the case of the lost battle against music file-sharing, C. Geiger (2012), Counterfeiting and the Music Industry: Towards a Criminalization of End Users? The French "HADOPI" example, in C. Geiger (Ed.), Criminal Enforcement of Intellectual Property: A Handbook of Contemporary Research, p. 386. For an economic perspective see A. Wechsler (2012), Criminal Enforcement of Intellectual Property Law: An Economic Approach, in C. Geiger (Ed.), Criminal Enforcement of Intellectual Property: A Handbook of Contemporary Research, p. 128.

¹⁴⁴For a historical, economic and psychological perspective on criminal enforcement, see the chapters by D. Lefranc (2012), Historical Perspective on Criminal Enforcement; A. Wechsler (2012), Criminal Enforcement of Intellectual Property Law: An Economic Approach and A. Peukert (2012), Why do "Good People" Disregard Copyright on the Internet?, in C. Geiger (Ed.), Criminal Enforcement of Intellectual Property: A Handbook of Contemporary Research.

- Commission on Human Rights (2001), Report of the High Commissioner on Economic, Social and Cultural Rights: The Impact of the Agreement on Trade-Related Aspects of Intellectual Property Rights on Human Rights, E/CN.4/Sub.2/2001/13
- Commission on Human Rights (2002), Report of the High Commissioner for Human Rights: Globalization and Its Impact on the Full Enjoyment of Human Rights, E/CN.4/2002/54
- Commission on Human Rights (2005), Report of the Working Group on Arbitrary Detention, Chairperson-Rapporteur, Leila Zerrougui: Civil and Political Rights, Including the Question of Torture and Detention, E/CN.4/2006/7
- Correa, C.M. (2007), Trade Related Aspects of Intellectual Property Rights: A Commentary on the TRIPS Agreement, Oxford: Oxford University Press
- Correa, C.M. (2009), The Push for Stronger Enforcement Rules: Implications for Developing Countries, in The Global Debate on the Enforcement of Intellectual Property Rights and Developing Countries, pp. 27–80, Geneva: International Centre for Trade and Sustainable Development
- Creemers, R. (2009), The Effects of World Trade Organization Case DS362 on Audiovisual Media Piracy in China, 31 EIPR 2009, 568, London: Sweet & Maxwell
- D'Erme, R., Geiger, C., Grosse-Ruse Kahn, H., Heinze, C., Jaeger, T., Matulionyte, R., Metzger, A. (2013), The Impact of the Anti-Counterfeiting Trade Agreement on the Legal Framework for IP Enforcement in the European Union, in C. Geiger (Ed.), Constructing European Intellectual Property: Achievements and New Perspectives, pp. 394–408, Cheltenham, UK and Northampton, MA: Edward Elgar
- De Beer, J. (2013), Applying Best Practice Principles to International Intellectual Property Lawmaking, 44 IIC 2013, 884, Munich/Berlin: C.H. Beck/Springer
- Desmedt, A. (2001), Proportionality in WTO Law. 4 J. Int'l Econ. L. 2001, 441 Oxford: Oxford University Press
- Dinwoodie, G.D. & Dreyfuss, R.C. (2005), WTO Dispute Resolution and the Preservation of the Public Domain of Science under International Law, in K.E. Maskus & J.H. Reichman (Eds.), International Public Goods and Transfer of Technology under a Globalized Intellectual Property Regime, pp. 861–883, Cambridge: Cambridge University Press
- Drexl, J. (2014), Intellectual Property and Implementation of Recent Bilateral Trade Agreements in the EU, in J. Drexl, H. Grosse Ruse-Khan & S. Nadde-Phlix (Eds.), EU Bilateral Trade Agreements and Intellectual Property: For Better or Worse?, pp. 265–292, Berlin/Heidelberg: Springer Verlag
- European Patent Office (EPO) and the Office for Harmonization in the Internal Market (Trade Marks and Designs) (OHIM) (2013), Industry-Level Analysis Report: Intellectual Property Rights Intensive Industries: Contribution to Economic Performance and Employment in the European Union
- Flynn, S.M., Baker, B.K., Kaminski, M. & Koo, J. (2012), The US Proposal for an Intellectual Property Chapter in the Trans-Pacific Partnership Agreement, 28 Am. U. Int'l L. Rev. 2012, 105, Washington D.C.: American University Washington College of Law
- Frankel, S. (2006), WTO Application of "the Customary Rules of Interpretation of Public International Law" to Intellectual Property, 46 Va. J. Int'l L. 2006, 365, Charlottesville: The Virginia Journal of International Law Association
- Geiger, C. (2006), "Constitutionalizing" Intellectual Property Law: The Influence of Fundamental Rights on Intellectual Property in Europe, 37 IIC 2006, 371, Munich/Berlin: C.H. Beck/ Springer
- Geiger, C. (2009), Copyright's Fundamental Rights Dimension at EU Level, in E. Derclaye (Ed.), Research Handbook on the Future of EU Copyright, pp. 27–48, Cheltenham, UK and Northampton, MA: Edward Elgar
- Geiger, C. (2012), Counterfeiting and the Music Industry: Towards a Criminalization of End Users? The French "HADOPI" Example, in C. Geiger (Ed.), Criminal Enforcement of Intellectual Property: A Handbook of Contemporary Research, pp. 386–402, Cheltenham, UK and Northampton, MA: Edward Elgar

- Geiger, C. (2012), The Anti-Counterfeiting Trade Agreement and Criminal Enforcement of Intellectual Property: What Consequences for the European Union?, in J. Rosen (Ed.), IP Rights at the Crossroads of Trade, pp. 167–181, Cheltenham, UK and Northampton, MA: Edward Elgar
- Geiger, C. (2012), Weakening Multilateralism in Intellectual Property Lawmaking: A European Perspective on ACTA, 3 WIPO Journal 2012, 166, Geneva: WIPO
- Geiger, C. (2012), Criminal Enforcement of Intellectual Property: A Handbook of Contemporary Research, Cheltenham, UK and Northampton, MA: Edward Elgar
- Geiger, C. (2014), The Anti-Counterfeiting Trade Agreement (ACTA) and Beyond: Towards a Differentiated Approach to Criminal Enforcement of Intellectual Property Rights at Global Level, in P. Roffe & X. Seuba (Eds.), The ACTA and the Plurilateral Enforcement Agenda: Genesis and Aftermath, pp. 100–114, Cambridge: Cambridge University Press
- Geiger, C. (2014), The Rise of Criminal Enforcement of Intellectual Property Rights . . . and its Failure in the Context of Copyright Infringements on the Internet, in S. Frankel & D. Gervais (Eds.), The Evolution and Equilibrium of Copyright in the Digital Age, pp. 113–142, Cambridge: Cambridge University Press
- Geiger, C. (2015), Implementing Intellectual Property Provisions in Human Rights Instruments: Towards a New Social Contract for the Protection of Intangibles, in C. Geiger (Ed.), Research Handbook on Human Rights and Intellectual Property, pp. 661–689, Cheltenham, UK and Northampton, MA: Edward Elgar
- Geiger, C. & Izyumenko, E. (2014), Copyright on the Human Rights' Trial: Redefining the Boundaries of Exclusivity through Freedom of Expression, 45 IIC 2014, 316, Munich/Berlin: C.H. Beck/Springer
- Gervais, D. (2009), China Measures Affecting the Protection and Enforcement of Intellectual Property Rights, 103 AJIL 2009, 549, Washington D.C.: American Society of International Law
- Gervais, D. (2012), Criminal Enforcement in the US and Canada, in C. Geiger (Ed.), Criminal Enforcement of Intellectual Property: A Handbook of Contemporary Research, pp. 269–285, Cheltenham, UK and Northampton, MA: Edward Elgar
- Gervais, D. (2003), The TRIPS Agreement: Drafting History and Analysis, 2nd ed., London: Sweet and Maxwell
- Gracz, K. (2013), On the Role of Copyright Protection in the Information Society, Anti-ACTA Protests in Poland as a Lesson in Participatory Democracy, 4 JIPITEC 2013, 21, Göttingen: Universitätsverlag Göttingen
- Griffiths, J. (2012), Criminal Liability for Intellectual Property Infringement in Europe: The Role of Fundamental Rights, in C. Geiger (Ed.), Criminal Enforcement of Intellectual Property: A Handbook of Contemporary Research, pp. 191–212, Cheltenham, UK and Northampton, MA: Edward Elgar
- Griffiths, J. (2015), Enforcement of Intellectual Property Rights and the Right to a Fair Trial, in C. Geiger (Ed.), Research Handbook on Human Rights and Intellectual Property, Cheltenham, UK and Northampton, MA: Edward Elgar (forthcoming)
- Grosse Ruse-Khan, H. (2008), A Comparative Analysis of Policy Space in WTO Law, Max Planck Institute for Intellectual Property, Competition and Tax Law Research Paper Series No 02–02 (reproduced in: A. Kur (2011), Intellectual Property Rights in a Fair World Trade System: Proposals for Reform of TRIPS, pp. 167–207, Cheltenham, UK and Northampton, MA: Edward Elgar)
- Grosse Ruse-Khan, H. (2008), Proportionality and Balancing within the Objectives for Intellectual Property Protection, in P.L.C. Torremans (Ed.), Intellectual Property and Human Rights, Enhanced Edition of Copyright and Human Rights, pp. 161–194, Alphen aan den Rijn: Kluwer Law International
- Grosse Ruse-Khan, H. (2011), The (Non) Use of Treaty Object and Purpose in Intellectual Property Disputes in the WTO, Max Planck Institute for Intellectual Property and Competition Law Research Paper Series No. 11–15

Grosse Ruse-Khan, H. (2012), Criminal Enforcement and International IP Law, in C. Geiger (Ed.), Criminal Enforcement of Intellectual Property: A Handbook of Contemporary Research, pp. 171–190, Cheltenham, UK and Northampton, MA: Edward Elgar

- Habermas, J. (1998), Between Facts and Norms: Contributions to a Discourse Theory of Law and Democracy, Cambridge, Massachusetts: The MIT Press
- Hamilton, M.A. (1996), The TRIPS Agreement: Imperialistic, Outdated, and Overprotective, 29 Vand. J. Transnat'l L. 1996, 613, Tennessee: Vanderbilt University Law School
- Hannum, H. (1995–1996), The Status of the Universal Declaration of Human Rights in National and International Law, 25 Geo. J. Int'l L. 1995–1996, 287, Athens, GA: The University of Georgia School of Law
- Hardy, T. (2002), Criminal Copyright Infringement, 11 William and Mary Bill of Rights Journal 2002, 305, Williamsburg, VA: William & Mary School of Law
- Harris, D.P. (2008), The Honeymoon is Over: The U.S.-China WTO Intellectual Property Complaint, 32 Fordham Int'l L.J. 2008, 96, New York City: Fordham University School of Law
- Hayek, F. (1976), Law, Legislation and Liberty, Volume 2, London/Chicago: University of Chicago Press
- Held, V. (1970), The Public Interest and Individual Interests, New York: Basic Books
- Helfer, L.R. (2004), Regime Shifting: The TRIPS Agreement and New Dynamics of International Intellectual Property Lawmaking, 29 Yale J. Int'l L. 2004, 1, New Haven: Yale Law School
- Helfer, L.R. (2006), Three Approaches for Reconciling Human Rights and Intellectual Property Rights, in ALADDA (Ed.), Copyrights and Freedom of Expression, ALAI Study Days, p. 116, Barcelona: ALADDA
- Helfer, L.R. (2007), Toward a Human Rights Framework for Intellectual Property, 40 UC Davis L. Rev. 2007, 971, Davis, CA: UC Davis School of Law
- Hestermeyer, H. (2007), Human Rights and the WTO: The Case of Patents and Access to Medicines, Oxford: Oxford University Press
- Hilf, M. (2001), Power, Rules and Principles Which Orientation for WTO/GATT Law?, 4 J. Int'l Econ. L. 2001, 111, Oxford: Oxford University Press
- Hilty, R.M., Kur, A. & Peukert, A. (2006), Statement of the Max Planck Institute for Intellectual Property, Competition and Tax Law on the Proposal for a Directive of the European Parliament and the Council on Criminal Measures aimed at ensuring the enforcement of intellectual property rights, 37 IIC 2006, 970, Munich/Berlin: C.H. Beck/Springer
- Howse, R. (2000), The Canadian Generic Medicines Panel: A Dangerous Precedent in Dangerous Times, 3 J. W. Intell. Prop. 2000, 493, Hoboken: John Wiley & Sons
- Howse, R. & Mutua, M. (2000), Protecting Human Rights in a Global Economy: Challenges for the World Trade Organization, Montreal: International Centre for Human Rights and Democratic Development
- Judd, P.L. (2011), Toward a TRIPS Truce, 32 Mich. J. Int'l L. 2011, 613, Ann Arbor: Michigan Journal of International Law
- Kaminski, M. (2013), The TPP and Copyright, Concurring Opinions of 14 November, available at: http://www.concurringopinions.com/archives/2013/11/the-tpp-and-copyright.html (accessed October 2014)
- Kaminski, M. (2014), The Leaked TPP: Some Notes, and Criminal Copyright, Concurring Opinions of 16 November 2014, available at: http://www.concurringopinions.com/archives/ 2014/10/the-leaked-tpp-some-notes-and-criminal-copyright.html (accessed October 2014)
- Land, M. (2012), Rebalancing TRIPS, 33 Mich. J. Int'l L. 2012, 433, Ann Arbor: Michigan Journal of International Law
- Lefranc, D. (2012), Historical Perspective on Criminal Enforcement, in C. Geiger (Ed.), Criminal Enforcement of Intellectual Property: A Handbook of Contemporary Research, pp. 101–127, Cheltenham, UK and Northampton, MA: Edward Elgar
- Malbon, J. & Lawson, C. (2008), Interpreting and Implementing the TRIPS Agreement: Is it Fair?, Cheltenham, UK and Northampton, MA: Edward Elgar

- Manta, I.D. (2011), The Puzzle of Criminal Sanctions for Intellectual Property Infringement, 24 Harv. J.L. & Tech. 2011, 469, Cambridge: Harvard University School of Law
- Marceau, G. (2002), WTO Dispute Settlement and Human Rights, 13 EJIL 2002, 753, Oxford: Oxford University Press
- Marceau, G. (2005), The WTO Dispute Settlement and Human Rights, in F.M. Abbott, C. -Breining-Kaufmann & T. Cottier (Eds.), International Trade and Human Rights: Foundations and Conceptual Issues, World Trade Forum, pp. 181–260, Ann Arbor: University of Michigan Press
- Matthews, D. & Zikovska, P. (2013), The Rise and Fall of the Anti-Counterfeiting Trade Agreement (ACTA): Lessons for the European Union, 44 IIC 2013, 626, Munich/Berlin: C.H. Beck/Springer
- McLachlan, C. (2005), The Principle of Systemic Integration and Article 31(3)(c) of the Vienna Convention, 54 Int'l & Comp. L.Q. 2005, 279, London: British Institute of International and Comparative Law
- Moohr, G.S. (2003), The Crime of Copyright Infringement: An Inquiry based on Morality, Harm and Criminal Theory, 83 B.U. L. Rev. 2003, 731, Boston: Boston University School of Law
- Mylly, T. (2012), Criminal Enforcement and European Union Law, in C. Geiger (Ed.), Criminal Enforcement of Intellectual Property: A Handbook of Contemporary Research, pp. 213–244, Cheltenham, UK and Northampton, MA: Edward Elgar
- Mylly, T. (2014), Constitutional Functions of the EU's Intellectual Property Treaties, in J. Drexl, H. Grosse Ruse-Khan & S. Nadde-Phlix (Eds.), EU Bilateral Trade Agreements and Intellectual Property: For Better or Worse?, pp. 241–264, Berlin/Heidelberg: Springer Verlag
- OECD (2008), The Economic Impact of Counterfeiting and Piracy, Paris: OECD Publishing, Updated in OECD (2009), Magnitude of Counterfeiting and Piracy of Tangible Products: An Update
- Okediji, R.L. (2003), Public Welfare and the Role of the WTO: Reconsidering the TRIPS Agreement, 17 Emory Int'l L. Rev. 2003, 819, Atlanta, GA: Emory University School of Law
- Peukert, A. (2012), Why do "Good People" Disregard Copyright on the Internet?, in C. Geiger (Ed.), Criminal Enforcement of Intellectual Property: A Handbook of Contemporary Research, pp. 151–167, Cheltenham, UK and Northampton, MA: Edward Elgar
- Rawls, J. (1999), A Theory of Justice, Cambridge, MA: Belknap Press of Harvard University Press
 Reichman, J.H. (1995), The Know-How Gap in the TRIPS Agreement: Why Software Fared
 Badly, and What Are the Solutions, 17 Hastings Comm. & Ent. L.J. 1995, 763, San Francisco,
 CA: Hastings College of the Law
- Reichman, J.H. (1996), Compliance with the TRIPS Agreement: Introduction to a Scholarly Debate, 23 Vand. J. Transnat'l L. 1996, 363, Tennessee: Vanderbilt University Law School
- Reichman, J.H. (1997), Enforcing the Enforcement Procedures of the TRIPS Agreement, 37 Va. J. Int'l L. 1997, 335, Charlottesville: The Virginia Journal of International Law Association
- Reichman, J.H. & Lange, D. (1998), Bargaining around the TRIPS Agreement: The Case for Ongoing Public-Private Initiatives to Facilitate Worldwide Intellectual Property Transactions, 9 Duke J. Comp. & Int'l L. 1998, 11, Durham: Duke University School of Law
- Remiche, B. (2007), L'Accord ADPIC, dix ans après: un accord de libre-échange ou d'intégration forcée?, in B. Remiche & J. Kors (Eds.), L'Accord ADPIC, 10 Ans Après: Regards Croisés, Europe-Amérique Latine, pp. 527–542, Brussels: Larcier
- Remiche, B. & Kors, J. (2007), L'Accord ADPIC, 10 Ans Après: Regards Croisés, Europe-Amérique Latine, Brussels: Larcier
- Sell, S.K. (2011), TRIPS was never enough: Vertical forum shifting, FTAs, ACTA, and TPP, 18 J. Intell. Prop. L. 448, Athens, GA: The University of Georgia School of Law
- Seuba, X. (2013), Intellectual Property in Free Trade Agreements: What Treaties, What Content?, 16 J. W. Intell. Prop. 2013, 240, Hoboken: John Wiley & Sons
- Seuba, X. (2015), Human Rights and Intellectual Property Law at Bilateral and Multilateral Levels: Substantive and Operational Aspects, in C. Geiger (Ed.), Research Handbook on

- Human Rights and Intellectual Property, pp. 173–200, Cheltenham, UK and Northampton, MA: Edward Elgar
- Smith, R. (2015), Interactions between International Human Rights Law and the European Legal Order, in C. Geiger (Ed.), Research Handbook on Human Rights and Intellectual Property, pp. 52–69, Cheltenham, UK and Northampton, MA: Edward Elgar
- Sub-Commission on Human Rights (2000), Intellectual Property Rights and Human Rights, E/CN.4/SUB.2/RES/2000/7
- Sub-Commission on Human Rights (2001), Intellectual Property and Human Rights, E/CN/4/SUB.2/RES/2001/21
- Sweet, A.S. & Mathews, J. (2008), Proportionality Balancing and Global Constitutionalism, 47 Colum. J. Transnat'l L. 2008, 72, New York, NY: Columbia Law School
- Taubman, A. (2011), A Practical Guide to Working with TRIPS, Oxford: Oxford University Press Tridimas, T. (1999), The General Principles of EC Law, Oxford: Oxford University Press
- UNCTAD-ICTSD (2005), Resource Book on TRIPS and Development, Cambridge University Press
- Vaver, D. & Basheer, S. (2006), Popping Patent Pills: Europe and a Decade's Dose of TRIPS, 28 EIPR 2006, 282, London: Sweet & Maxwell
- Voorhoof, D & Hoedt-Rasmussen, I. (2013), ECHR: Copyright vs. Freedom of Expression II (the Pirate Bay), available at: http://kluwercopyrightblog.com/2013/03/20/echr-copyright-vs-freedom-of-expression-ii-the-pirate-bay/ (accessed October 2014)
- Watal, J. (2014), Is TRIPS a Balanced Agreement from the Perspective of Recent Free Trade Agreements?, in J. Drexl, H. Grosse Ruse-Khan & S. Nadde-Phlix (Eds.), EU Bilateral Trade Agreements and Intellectual Property: For Better or Worse?, pp. 41–60, Berlin/Heidelberg: Springer Verlag
- Weatherall, K. (2012), Joint Standing Committee on Treaties Anti-Counterfeiting Trade Agreement, Submission No. 3, 9
- Weatherall, K. (2013), TPP Australian Section-by-Section Analysis of the Enforcement Provisions of the August Leaked Draft, available at: http://works.bepress.com/cgi/viewcontent.cgi?article=1032&context=kimweatherall (accessed October 2014)
- Weatherall, K. (2014), TPP Section-by-Section Analysis of Some Provisions People Aren't Talking About (May 2014 leaked draft), available at: http://ssrn.com/abstract=2516058 (accessed October 2014)
- Wechsler, A. (2012), Criminal Enforcement of Intellectual Property Law: An Economic Approach, in C. Geiger (Ed.), Criminal Enforcement of Intellectual Property: A Handbook of Contemporary Research, pp. 128–150, Cheltenham, UK and Northampton, MA: Edward Elgar
- Woods, T. (2009), Copyright Enforcement at all Costs? Considerations for Striking Balance in the International Enforcement Agenda, 37 AIPLA Qu. J. 2009, 347, Arlington: American Intellectual Property Law Association
- WTO Panel (2000), Report on Canada Patent Protection of Pharmaceutical Products, WT/DS114/R
- WTO Panel (2009), Report on China Measures Affecting the Protection and Enforcement of Intellectual Property Rights, WT/DS362/R
- Xue, H. (2009), Enforcement for Development: Why not an Agenda for the Developing World?, in Li, X. & Correa, C.M. (Eds.), Intellectual Property Enforcement: International Perspectives, pp. 133–156, Cheltenham, UK and Northampton, MA: Edward Elgar
- Xue, H. (2009), An Anatomical Study of the United States versus China at the World Trade Organization on Intellectual Property Enforcement, 31 EIPR 2009, 292, London: Sweet & Maxwell
- Yu, P.K. (2006), TRIPs and its Discontents, 10 Marquette Intell. Prop. L. Rev. 2006, 369, Marquette: Marquette University Law School
- Yu, P.K. (2007), The International Enclosure Movement, 82 Ind. L.J. 2007, 827, Bloomington: Indiana University Maurer School of Law

- Yu, P.K. (2007), Reconceptualizing Intellectual Property Interests in a Human Rights Framework, 40 UC Davis L. Rev. 2007, 1039, Davis, CA: UC Davis School of Law
- Yu, P.K. (2007), Ten Common Questions about Intellectual Property and Human Rights, 23 Ga. St. U. L. Rev. 2007, 709, Atlanta, GA: GSU College of Law
- Yu, P.K. (2009), The Objectives and Principles of the TRIPS Agreement, 46 Hous. L. Rev. 2009, 979, Houston: Houston Law Review
- Yu, P.K. (2010), The U.S.-China Dispute over TRIPS Enforcement, Drake University Law School, Occasional Papers in Intellectual Property Law 5, Des Moines, IA: Drake University Law School
- Yu, P.K. (2011), The TRIPS Enforcement Dispute, 89 Neb. L. Rev. 2011, 1046, Lincoln, NE: University of Nebraska College of Law
- Yu, P.K. (2011), TRIPS and its Achilles' Heel, 18 J. Intell. Prop. L. 2011, 479, Athens, GA: The University of Georgia School of Law
- Yu, P.K. (2012), Shaping Chinese Criminal Enforcement Norms through the TRIPS Agreement, in C. Geiger (Ed.), Criminal Enforcement of Intellectual Property: A Handbook of Contemporary Research, pp. 286–309, Cheltenham, UK and Northampton, MA: Edward Elgar

TRIPS and Consumer Protection

Ansgar Ohly

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Abstract Consumer protection plays an increasingly important role in intellectual property law, both as an objective of legislation and as an argument in the political debate. Consumer interests may be protected by intellectual property law, but consumers may also need protection against excessive protection and enforcement. While the TRIPS Agreement does not explicitly mention consumer interests, Articles 7 and 8 provide a basis for taking them into account in the course of interpretation. This chapter identifies three levels of interaction between intellectual property law and consumer interests. First, the interests of users in general and of consumers in particular are one factor in the welfare balance which underlies intellectual property law. Secondly, consumers may be affected in their role as users of intangible subject-matter. Thirdly, some areas of intellectual property law, most notably trade mark law, protect the consumers' decision making process against distortion. The chapter concludes that while consumer interests have rightly

Prof. Dr. Ansgar Ohly, LL.M. (Cambridge) is Professor at the Ludwig-Maximilians-University of Munich and Visiting Professor at the University of Oxford.

A. Ohly (⊠)

Ludwig-Maximilians-University, Munich, Germany

e-mail: ansgar.ohly@jura.uni-muenchen.de

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entered the intellectual property arena, they are too often instrumentalised by both intellectual property optimists and pessimists.

1 Introduction: Consumer Protection by or against Intellectual Property?

At first sight, "TRIPS and Consumer Protection" seems to be a non-topic. Traditionally, the interests of individual consumers have not played any role in intellectual property law and policy. From an individualist or deontological perspective, copyrights and patents protect authors and inventors because they deserve such protection. The interests of users may justify exceptions, but users are not perceived in their market role as consumers. Utilitarian, in particular economic theories take better account of market mechanisms. These theories stress that intellectual property rights serve the common good by promoting innovation. Consumer interests are one factor in this welfare balance, but they are only considered in a macroeconomic sense under efficiency aspects. Trade mark law is special in that it helps consumers to identify goods and services and to distinguish between them. But this effect is often only seen as a mere factual reflex of the protection afforded to trade mark owners. Property of the protection afforded to trade mark owners.

The TRIPS Agreement mirrors this approach. It contains several references to the interests of right owners. According to the tests that govern the possibility of member states to create exceptions,³ for example, the legitimate interests of the right owners must not be unreasonably prejudiced. But the Agreement is also conscious of the fact that intellectual property rights serve public interests. Article 7 of the Agreement refers to "social and economic welfare" and emphasizes that both the interests of producers and of users of technology are to be taken into account. Article 8 allows member states to adopt measures "necessary to protect public health and nutrition" and to prevent the abuse of intellectual property rights. While users of technology may be consumers and while consumer welfare is a part of the general public interest, consumer needs are not mentioned as such. Indeed, the word "consumer" only appears once in the Agreement, in a rather inconspicuous provision on homonymous geographical indications for wine, ⁴ i.e. in an area where intellectual property law and unfair competition law overlap.

¹ N. Reich (2003), Verbraucherinteressen und gewerblicher Rechtsschutz, in N. Reich & H.-W. Micklitz (Eds.), Europäisches Verbraucherrecht, pp. 219, 227.

² See the references infra at Sect. 3.4.

³ Articles 13 (copyright), 17 (trade marks) and 30 (patents).

⁴ Article 23(3) TRIPS provides that in the case of homonymous geographical indications for wines, protection shall be accorded to each indication, but member states shall take into account the need to ensure equitable treatment of consumers and to make sure that consumers are not misled.

In recent years, however, consumer protection has entered the agenda of intellectual property law, both as an objective of legislation⁵ and as an argument in the political debate. As a review of academic literature and internet resources reveals, consumer interests are invoked by both intellectual property optimists and pessimists. On the one hand, intellectual property can play a role in protecting consumer interests. This is most obvious in the field of trade mark law, which guarantees market transparency and hence enables consumers to distinguish and choose between products. But consumer protection has also been invoked as a justification for stricter anticounterfeit legislation. On the other hand, consumers want good deals, and intellectual property increases prices. Copyright law, in particular, also restricts the access of consumers to digital works and the freedom to use works for private purposes. Even when consumers have bought data carriers or paid for the online access to copyrighted works, they may not be free to use these works due to contractual restrictions, which are often coupled with digital rights management systems (DRM). Consumers may also be affected by aggressive enforcement measures, 8 in particular in legal systems which allow right owners to claim the cost of warning letters from infringers.⁹

This chapter will ask if and when consumer interests are protected *by* intellectual property, but also if and when they have to be protected *against* intellectual property. For this purpose it seems important to look at the aims of consumer law and policy (Sect. 2). It will be seen that consumer protection law in a narrow sense aims at securing the economic self-determination of consumers and at compensating market failure resulting from information asymmetries or from the inequality of bargaining power. In a broader sense, consumer policy encompasses all initiatives which aim at improving the economic situation of consumers in general. On this basis, three ways in which intellectual property interacts with consumer interests will be identified (Sect. 3.1): consumer interests as one factor of the general welfare

- (1) has been connected with organized crime;
- (2) deprives legitimate trademark and copyright owners of substantial revenues and consumer goodwill:
- (3) poses health and safety threats to United States consumers;
- (4) eliminates United States jobs; and
- (5) is a multibillion-dollar drain on the United States economy.

⁵ See the US Anticounterfeiting Consumer Protection Act of 1996, the Anticybersquatting Consumer Protection Act of 1999 and Recital 1 of the Proposal for a Directive of the European Parliament and of the Council on Criminal Measures aimed at ensuring the Enforcement of Intellectual Property Rights, COM/2006/0168 final - COD 2005/0127.

⁶ Infra at Sect. 3.4.

⁷ See Article 2 of the US Anti-Counterfeit Consumer Protection Act, which provides (italics added): The counterfeiting of trademarked and copyrighted merchandise—

⁸ T. Kreutzer (2011), Verbraucherschutz im Urheberrecht, pp. 82–98.

⁹ As is the case in Germany, see § 97a(3) of the German Copyright Act, and T. Kreutzer (2011), Verbraucherschutz im Urheberrecht, pp. 82–98.

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balance underlying intellectual property law (Sect. 3.2), the consumer interest in cheap and ready access to products embodying intangible subject-matter (Sect. 3.3) and the protection of informed consumer choices (Sect. 3.4).

2 Consumer Protection

2.1 International and Supranational Law

While legal systems have always protected consumers against fraud and against risks emanating from defective products, consumer protection law only emerged as a distinct area of private law in the 1960s. President John F. Kennedy's "Special message to Congress on protecting consumer interests" of 15 March 1962¹⁰ is often seen as the initiating moment. In his message, Kennedy identified four consumer interests: the right to safety, the right to be informed, the right to choose, and the right to be heard, and argued that the present laws on the statute books were inadequate to protect these rights. Gradually, governments and parliaments in many countries became attentive to consumer interests and introduced legislation on areas such as product safety, against misleading statements, on unfair contract terms, on the revocation of consumer contracts. Meanwhile, legislation abounds, and consumer protection has become a favourite on the political agenda of many governments and parties.

While there is no international treaty on consumer protection, the UN General Assembly adopted non-binding Guidelines for Consumer Protection in 1985, which were amended in 1999 and which are currently under revision. In the EU, the aim of consumer protection has been given constitutional status. According to Article 38 of the EU Charter of Fundamental Rights, "Union policies shall ensure a high level of consumer protection", and pursuant to Article 169 TFEU "the Union shall contribute to protecting the health, safety and economic interests of consumers, as well as to promoting their right to information, education and to organise themselves in order to safeguard their interests." A multitude of EU regulations and directives protecting consumer interests has been passed.

2.2 Consumers and Users

The intellectual property discourse is more familiar with "users" than with "consumers". Article 7 TRIPS states that the interests of "users of technology" must be taken into account; in copyright law there is an extensive discussion about "users' rights". Thus it seems important to clarify the relationship between both concepts.

¹⁰ Available online at http://www.jfklibrary.org/Asset-Viewer/Archives/JFKPOF-037-028.aspx.

While there is no single definition in EU law, several modern directives define the term "consumer" as "any natural person who is acting for purposes which are outside his trade, business, craft or profession". The concept of "user", on the other hand, is not defined in intellectual property treaties or statutes. A user is a person who uses the intangible good which is protected by an intellectual property right. An engineer who produces a patented machine uses the invention; a trader uses a protected trade mark by selling goods under it; a participant of a file-sharing system who uploads an audio file uses the work.

This allows a first distinction between industrial property and copyright law. Patent, trade mark and design law do not prohibit private use. Hence, consumers are not affected directly by industrial property rights in that they cannot infringe them. A consumer is not a "user of technology" in the sense of Article 7 TRIPS when he or she buys a technology product. But consumers may be affected indirectly because goods embodying intellectual property are likely to be more expensive than comparable goods which fall outside the scope of protection. Copyright, on the other hand, extends to private acts. Traditionally, most forms of private use have fallen outside the economic rights protected by copyright law: non-technically speaking, reading a book may be seen as a type of "use", but the enjoyment of a work used to be free. This has changed in the digital world, as will be explored in Sect. 3.3.

2.3 Consumer Interests

Despite extensive consumer legislation, "consumer protection" remains an amorphous concept, as can be shown by an analysis of the seven "legitimate consumer needs" identified by the UN Guidelines:

- protection of consumers from hazards to their health and safety;
- promotion and protection of the economic interests of consumers;
- access of consumers to adequate information to enable them to make informed choices;
- consumer education:
- availability of effective consumer redress;
- freedom to form consumer groups or organizations;
- promotion of sustainable consumption patterns.

Some of these "needs", in particular the interest in education, effective redress and in forming organizations, are procedural. Some address typical weaknesses of consumers in markets: since producers know their products better than consumers do, market information is often asymmetrical. Also, consumers know less about product risks and may not be in a position to protect themselves. But the Guidelines contain a more general and vague commitment to the "economic interests of

¹¹ See Article 2(1) of Directive 2011/83/EU on consumer rights, OJ L 304/64 of 22.11.2011; Article 2(a) of the Unfair Commercial Practices Directive 2005/29/EC, OJ L 149/22 of 11.6.2005.

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consumers" in general, which seems to assume that it is the aim of consumer law to improve the situation of consumers regardless of whether they are exposed to situations in which market mechanisms fail.

This highlights two different approaches to consumer protection. On a narrower approach, it is the task of consumer law to safeguard the economic self-determination of consumers and to protect consumers in typical situations in which market mechanisms fail. The consumer is protected in his role as a market participant. This approach underlies many modern consumer protection statutes, for example the EU Directive on Consumer Rights, which provides for duties of information and for a revocation right with respect to distance contracts and contracts negotiated away from business premises. A theoretical underpinning is given by Josef Drexl. He rejects the proposition that consumers are always the weaker party, and argues that, in principle, self-determination in a market economy is in the consumer's best interest. Hence he distinguishes between rules which constitute the legal framework of self-determination and rules which compensate particular situations of market failure such as an information asymmetry or the inequality of bargaining power. According to Drexl, the aim of consumer policy is not maximal but optimal consumer protection.

In the public discussion, the objective of consumer protection is defined in broader terms. This approach is adopted by the UN Guidelines, when they identify the "promotion and protection of the economic interests of consumers" as one of the aims of consumer law and policy. In this sense, consumer health and safety, but also his or her access to necessary goods and to information at reasonable prices are seen as aims of consumer policy. This approach is more comprehensive, but it risks conflating consumer policy with social justice.

3 Consumer Interests and Intellectual Property Law

3.1 Three Levels of Interaction

The discussion of the aims of consumer law and policy has shown that a distinction should be drawn between consumer protection law in a narrow sense on the one hand and policy arguments on the other hand which do not focus on a consumer's market behaviour but on his or her role as a purchaser of goods or a user of services, whose interests in access to and cheap prices of products may collide with right owners' interests in maximising their profits. Whereas there are strong policy reasons for protecting the economic self-determination of consumers, the more general interests of users in "good deals" does not per se outweigh the producers' interests.

On this basis, three ways in which intellectual property interacts with consumer interests can be identified. First, at the most general level consumer interests are one

¹² J. Drexl (1998), Die wirtschaftliche Selbstbestimmung des Verbrauchers, pp. 282–302.

factor in the welfare balance which underlies intellectual property law: "[I]n determining whether the world is better off with intellectual property rights, one must ask whether the intellectual property right produces a favourable trade-off between the short-term cost to consumers though higher prices and long-term benefit to consumers through increased innovation." This aspect will be analysed with respect to patent law, where it is arguably most prominent. Secondly, while industrial property does not directly affect consumer behaviour, copyright law may restricts the private and "consumptive" use of works. This conflict between right owners and consumers as potential infringers of intellectual property law will be analysed with respect to copyright law. Intellectual property law may, thirdly, protect the consumers' decision-making process against distortion and hence be a part of consumer protection law in the narrow sense. This is arguably one of the functions of trade mark law.

3.2 Consumer Interests as a Factor of the Welfare Balance: The Case of Patents

3.2.1 The Justification of the Patent System

Patent law is based on a trade-off.¹⁴ It restricts the freedom of imitation in order to foster innovation. In a world without patents, the inventor would try to keep his or her inventions secret. Wherever this was impossible, he or she could not prevent others from using the invention (non-exclusivity), and many persons could use it at the same time (non-rivalry). Inventions would be "public goods", for which nobody would be prepared to pay. By creating artificial scarcity, patent law creates technology markets and allows inventors to charge a price for their goods. Since imitation is excluded, this price is likely to be above the price charged in a market without such restrictions. This way, patent law "adds the fuel of interest to the fire of genius":¹⁵ it uses market mechanisms to create incentives for research and development.

The interests of users of technology and of consumers who buy the final products have been entered into this calculation. They must pay a higher price than in markets where inventions can be used freely. The market for pharmaceuticals is the prime example: as soon as patent protection for an important drug expires,

¹³ J.H. Barton (2001), The Economics of TRIPS: International Trade in Information-Intensive Products, 33 Geo. Wash. Int'l L.R. 2001, 473, 487.

¹⁴On the economic justification of patent law see W.M. Landes & R.A. Posner (2003), The Economic Structure of Intellectual Property Law, p. 294; R.D. Blair & T.F. Cotter (2005), Intellectual Property – Economic and Legal Dimensions of Rights and Remedies, pp. 13 et seq.; D. Guellec & B. van Pottelsberghe de la Potterie (2007), The Economics of the European Patent System, pp. 49–51.

¹⁵ As Abraham Lincoln famously put it in his Lecture on Discoveries and Inventions (1858–1859).

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producers of generic drugs enter the market and prices drop sharply. Now, all patients are consumers, and they may not be able to afford expensive drugs. But it would be simplistic to conclude that patent law conflicts with consumer interests and that consumer policy warrants the restriction of patent protection. Where the patent system works properly, the immediate consumer disadvantage of higher prices and a dead-weight loss is compensated by the long-term advantage of innovation: the consumer will have more and better products to choose from. The patented drug may be more expensive, but without the economic incentive created by the patent system, there is some likelihood that it would never have been invented. Within industrialised countries, it is the role of social policy, not of consumer protection law to ensure access to food and medicine to those who cannot afford to pay market prices. What is more, the trade-off between static inefficiency and dynamic efficiency concerns users of technology and purchasers of technology products in general. Thus the specific ratio of consumer protection law does not apply. There is no reason to presume that the demand side of a market is generally weaker than the supply side, and that it hence needs protection.

3.2.2 Dysfunctionalities of the Patent System and Consumer Welfare

Conversely, where the benefits of the patent system do not outweigh the disadvantages and where patent protection becomes inefficient, user and consumer interests may militate in favour of limiting patent protection. First, when creating exceptions to patent law, Article 30 TRIPS, which in this respect differs from the three-step test in copyright law, ¹⁶ allows member states to take the legitimate interests of third parties into account. Article 30 was interpreted by a WTO Panel in the *EC v. Canada* case concerning patent protection for pharmaceutical products. There is some force in Canada's contention that "third parties' included society at large, individual and institutional consumers of such regulated products and would-be competitor producers of those products", ¹⁷ in particular because the principles set out in Articles 7 and 8 have to be taken into account when interpreting Article 30. ¹⁸ Secondly, when a patent creates or strengthens a dominant position in a market, Article 8 TRIPS allows the member states to take measures against abuse. At this point, antitrust law comes into play, which has consumer welfare as one of its main objectives. ¹⁹ According to Article 102(2)(b) TFEU "limiting production, markets or technical

¹⁶ See Article 9(2) Berne Convention, Article 13 TRIPS and the WTO Panel Report at 7.71.

¹⁷ Panel Report, Canada – Patent Protection of Pharmaceutical Products, WT/DS114/R, adopted 7 April 2000, DSR 2000:V, p. 25; C.M. Correa (2007), Trade Related Aspects of Intellectual Property Rights, p. 311.

¹⁸ S. Reyes-Knoche (2009), in P.-T. Stoll, J. Busche & K. Arend (Eds.), WTO-Trade Related Aspects of Intellectual Property Rights, Article 30 para. 39.

¹⁹ R.H. Bork (1978), The Antitrust Paradox, p. 405; European Commission, case AT.39985 – Motorola, para. 480; G.J. Werden (2011), Consumer Welfare and Competition Policy, in J. Drexl, W. Kerber, R. Podszun (Eds.), Competition Policy and the Economic Approach, pp. 11–41.

development to the prejudice of consumers" is one example of abusive behaviour. One of the criteria of the ECJ's *Magill/IMS Health* test is whether the refusal to grant a licence prevents the emergence of a new product, for which there is potential consumer demand. Thirdly, there is a consumer interest in standardisation. Whenever there is a conflict between the interests of the owner of a standard-essential patent and the public interest in access to the standard, consumer interests weigh against granting full patent protection. But again, this is not a consumer protection consideration in the narrow sense of the term. Rather, the interests of consumers are considered from a macroeconomic perspective and taken into account when assessing the public interest.

Similar considerations apply with respect to conflicts between industrialised countries and the developing world about the appropriate standard of patent protection. Under the TRIPS Agreement, developing countries are under an unqualified obligation to protect patents, although the rights are mostly held by companies based in industrialised countries and although the majority of the population may not able to pay the price of patented products. Article 8 TRIPS and the Doha Declaration acknowledge the right of all countries to protect public health and nutrition, and it is legitimate under some circumstances to secure access to food and medicine, for example by granting compulsory licences. But this conflict, which is addressed elsewhere in this book, is not a conflict between patent law and consumer protection, but a conflict between the interests of states whose economies benefit from the patent system and states where the benefits of a patent system for the national economy are less clear.

3.2.3 Anti-counterfeiting Consumer Protection?

Sometimes consumer interests in a narrower sense are invoked as an argument for stricter anti-counterfeiting protection. Counterfeit products are often not as safe as the original product. As the WHO points out,²⁴ counterfeit medicine causes significant risks to the lives and the health of patients. Since the protection of health and

²⁰ ECJ, RTE and ITP v. Commission – Magill, joined cases C-241/91 P and C-242/91 P, EU: C:1995:98, para. 30; ECJ, IMS Health, C-418/01, EU:C:2004:257, para. 37.

²¹ The case-law and literature on standardisation cannot be reviewed here. See CJEU, Huawei v. ZTE, case C-170/13, EU:C:2015:477, German Federal Supreme Court (BGH), IIC 2005, 741 – Standard-Spundfass/Standard Tight-Head Drum; IIC 2010, 369 – Orange Book Standard, and R.P. Merges & J.M. Kuhn (2009), An Estoppel Doctrine for Patented Standards, 97 Cal. L. Rev. 2009, 1; P. Picht (2014), Standardsetzung und Patentmissbrauch – Schlagkraft und Entwicklungsbedarf des europäischen Kartellrechts, GRUR Int. 2014, 1; H. Ullrich (2010), Patents and Standards – A Comment on the German Federal Supreme Court Decision Orange Book Standard, IIC 2010, 337.

²² See for example Controller of Patents (Mumbai), Natco v. Bayer, IIC 2012, 597.

²³ See, in particular, the chapters by C. Antons, A.A. Machnicka and K.D. Beiter in Part IV of this book.

²⁴ WHO (2006), Public Health, Innovation and Intellectual Property Rights, pp. 105–106.

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safety is one of the aims of consumer protection law²⁵ and since health and safety are put at risk by counterfeit products, it could be argued that strict intellectual property standards protect consumers.²⁶ This argument is correct to the extent that trade mark law allows consumers to distinguish between goods or services, thereby protecting them from buying wrong and potentially dangerous products. But with respect to patent law, the argument is flawed for two reasons.²⁷ First, when consumers are not misled about the trade source of goods they are free to choose between the high-quality branded product and the cheaper and potentially dangerous imitation. Secondly, many counterfeit products which do not work are dangerous just because they do not embody the patented invention. When a counterfeit drug which is passed off as the original does not contain the effective therapeutic ingredient, it does not infringe. Hence patent law is not a very effective tool for protecting the health and safety of consumers.

3.3 Consumers as Private Users: The Case of Copyright Law

3.3.1 Users' Interests and Copyright Law in the Digital Age

Industrial property law does not restrict private acts. Hence it affects consumer interests only indirectly. Copyright, on the other hand, can be infringed by acts done by consumers for private purposes. In the analogue world the economic rights stemming from copyright were largely congruent with the commercial exploitation of work, whereas the mere enjoyment of a work was free. Before the advent of private copying technology, reproductions were made by publishers, who produced and distributed marketable products. Consumers had to buy books or pay for the visit of a performance, but their own acts of use—reading the book or listening to the performance—would not infringe. In the digital world, however, the nature of the reproduction right has changed. The enjoyment of digitalised works is impossible without acts of at least transient reproduction. The more files are traded online, the less the act of reproduction coincides with the production of a marketable product. By extending the time-honoured concept of reproduction to acts of a different economic significance, copyright has expanded to the detriment of consumers, who now must rely on copyright exceptions when enjoying digital works.²⁸

²⁵ For a discussion of the areas of law protecting the consumer interest in health and safety see A. Ohly (2012), Counterfeiting and Consumer Protection, in C. Geiger (Ed.), Criminal Enforcement of Intellectual Property, pp. 24, 32–36.

²⁶ See M. Blakeney (2009), International Proposals for the Criminal Enforcement of Intellectual Property Rights: International Concern with Counterfeiting and Piracy, IPQ 2009, 1, 10; and Gowers Review of Intellectual Property (2009), para. 5.112.

²⁷ See A. Ohly (2012), Counterfeiting and Consumer Protection, in C. Geiger (Ed.), Criminal Enforcement of Intellectual Property, pp. 24, 40.

²⁸ See the criticism by B. Hugenholtz (2000), Caching and Copyright: The Right of Temporary Copying, EIPR 2000, 482–493.

There are several reasons why copyright law in the digital world may have lost its prior balance. Recital 31 of the EU Directive on Copyright in the Information Society (InfoSoc Directive) states that a "fair balance of rights and interests between the different categories of right holders, as well as between the different categories of right holders and users of protected subject-matter must be safeguarded", but the directive does not live up to this requirement. While all acts of reproduction are covered by the reproduction right, transient copying is only justified under five cumulative and vague conditions, thereby the information and interpretation risk is imposed on the user.²⁹ The concept of "communication to the public" is open for new technological developments, whereas the catalogue of exceptions is closed.³⁰ The three-step test set forth by Article 13 TRIPS and Article 5(5) of the InfoSoc Directive is biased towards the interests of right owners, at least unless it is interpreted in a flexible wav.³¹

But the role of consumers in copyright law has also changed. The internet allows users to become producers in their own right. The neologism "prosumer" or "prod-user" aptly describes the phenomenon that on the Web 2.0 writers, musicians and producers of movies create derivative works by using and modifying pre-existing works. 33 "Mashups" or "fanfiction" are examples in point. Canada has just introduced a novel copyright exception for user-generated works, ³⁴ under US law the creation and publication on the internet of transformative works may amount to fair use. 35 European copyright law with its closed catalogue of exceptions may be ill-equipped to cope with the challenge posed by user-generated content. At EU level, the exception for "caricature, parody or pastiche" (Article 5 (3)(k) InfoSoc Directive) yet has to be tested in this regard, ³⁶ in German law the

²⁹ See Article 5(1) of Directive 2001/29/EC on the harmonisation of certain aspects of copyright and related rights in the information society, OJ L 167/10 of 22.06.2001, and, on the problems of interpretation surrounding this provision, CJEU, Public Relations Consultants Association, C-360/ 13, EU:C:2014:1195, and LG Köln MMR 2014, 193 – Redtube (on the issue of whether watching streamed illegal content on the internet amounts to a copyright infringement).

³⁰ See I. Hargreaves (2011), Digital Opportunity: A Review of Intellectual Property and Growth, para. 5.10: "Under the European approach to exceptions, new kinds of copying which have become possible due to advancing digital technology are automatically unlawful."

³¹ See Ch. Geiger, J. Griffiths & R. Hilty (2008), A Balanced Interpretation of the "Three-Step Test" in Copyright Law; M. Senftleben (2004), Copyright, Limitations and the Three-Step Test.

³² The term was coined by Alvin Toeffler: A. Toeffler (1980), The Third Wave, pp. 284–285.

³³ See R. Tushnet (2008), User-Generated Discontent: Transformation in Practice, 31 Colum. J.L. & Arts 2008, 497; N. Elkin-Koren (2007), Making Room for Consumers under the DCMA, 22 Berk. J.L. & Tech. 2007, 1119, 1142-1146; but see the criticism by J.C. Ginsburg (1995), Putting Cars on the "Information Superhighway": Authors, Exploiters, and Copyright in Cyberspace, 95 Colum. L. Rev. 1995, 1466, 1468, 1484-1488.

³⁴ Section 29.21 Canadian Copyright Act.

³⁵ See, for example, Cariou v. Prince, 134 U.S. 618 (2013): appropriation art as "fair use".

³⁶ The CJEU has held that the concept of parody must be given an autonomous interpretation, see CJEU, Deckmyn v. Vandersteen, C-201/13, EU:C:2014:2132, paras. 14-17.

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concept of "free use", ³⁷ which does not have an equivalent at EU level, may provide enough flexibility. ³⁸

It is important to submit the present rules on private copying, on the use of works in social media, on user-generated content and on the enforcement of copyright law against private persons to a critical analysis. I have done so elsewhere, ³⁹ and I have concluded that European and German copyright law are in need of reform. But is it appropriate to rephrase the discussion about the correct balance between the interests of authors, entrepreneurs and users into a consumer protection debate, as it is sometimes done?⁴⁰ As indicated above, the conflict between right owners and users of works does not affect the consumer in his or her role as a market participant. It is a part of the overall balance underlying copyright law. While it is the task of copyright policy to ensure a more level playing field between right owners and users, the ratio of consumer protection law has little to add to this discussion. User-generated content is an example in point. It is the aim of copyright law to protect the personal and economic interests of authors and to create an environment which is favourable to creativity. Where a transformative use does not interfere with the integrity of the original work and where the author's market position remains unaffected, there is no justifying reason for prohibiting the production and publication of the derivative work. On the contrary, the prod-user is a creator in his or her own right, and it should be the task of copyright law to protect this creation. But this is consideration is rooted in copyright policy, not in consumer protection considerations. There is only a quantitative, but no qualitative difference between private consumers and commercial users in this regard, and there is no presumption either that uses by consumers should be free because consumers are in a weaker position. Copyright law must strike the right balance between the interests of authors, entrepreneurs and users. But equating users with consumers or regarding copyright exceptions as consumer protection law would distort rather than clarify the policy balance.

3.3.2 Towards a Copyright Consumer Contract Law

In a more narrow sense, however, there may be a conflict between copyright law and the market interests of consumers. Whereas books are sold unconditionally, contracts of sale concerning digital goods often contain restrictions of use which are backed up by digital rights management (DRM) systems. In this situation, consumers lack the power and the motivation to negotiate the contract terms individually. Whereas restrictions in standard form contracts are subject to scrutiny under unfair contract terms legislation, producers may try to impose "unfair" restrictions

³⁷ Section 24 of the German Copyright Act.

³⁸ But see BGH GRUR 1999, 984 – Laras Tochter (sequel to the novel "Doctor Zhivago" as copyright infringement); BGH GRUR 2009, 403 – Metall auf Metall I (digital sampling not justified by Section 24 when infringer could have been expected to produce the sound sequence himself).

³⁹ A. Ohly (2014), Urheberrecht in der digitalen Welt, Gutachten F zum 70. Deutschen Juristentag.

⁴⁰ See, for example, T. Kreutzer (2011), Verbraucherschutz im Urheberrecht.

by technical means. There is also an information asymmetry, because consumers are not familiar with the technical features of the product and with the meaning of the legal restrictions. Hence there is a partial market failure which may need to be compensated by consumer protection law. 41 Digital exhaustion is an example in point. The CJEU has held that even the online transfer of software may trigger digital exhaustion. ⁴² For several reasons which cannot be exposed here, ⁴³ this judgment is highly problematic, as the concept of exhaustion is inextricably linked to the dichotomy between intellectual property law and a tangible information carrier. Beside this criticism, it is also an open question whether "digital exhaustion" is limited to the sale of software or whether it extends to the sale of other digital media such as video or audio files. 44 If exhaustion does not apply, consumer protection law has an important role to play. 45 When an offer for the purchase of an audio or a video file is explicitly termed an "offer for sale", it may be unfair for the seller to restrict the purchaser's right to resell the product. So far, the law of copyright contracts mainly focuses on contracts between the author and a publisher or media company. 46 It may be time to think about a "copyright consumer contract law".

3.4 Intellectual Property and Consumer Information: The Case of Trade Marks

3.4.1 Trade Mark Law as Consumer Protection Law?

Whereas in copyright law consumer interests tend to conflict with right owners' interests, both mostly walk hand in hand in trade mark law. A trade mark establishes a channel of communication, ⁴⁷ which enables the right owner to "broadcast"

⁴¹ See for German law M.-O. Mackenrodt (2015), Technologie statt Vertrag; for US law N. Elkin-Koren (2007), Making Room for Consumers under the DCMA, 22 Berk. J.L. & Tech. 2007, 1119, 1125–1138.

⁴² CJEU, Usedsoft v. Oracle, C-128/11, EU:C:2012:407.

⁴³ See A. Ohly (2015), Exhaustion of Rights: A Concept for the Digital World?, in D. Beldiman (Ed.), Innovation, Competition, Collaboration; H. Haberstumpf (2012), Der Handel mit gebrauchter Software im harmonisierten Urheberrecht, CR 2012, 561; H. Zech, (2013), Vom Buch zur Cloud, 5 ZGE/IPJ 2013, 368, 383.

⁴⁴ For extension to other types of files M. Grützmacher (2013), Endlich angekommen im digitalen Zeitalter!?, 5 ZGE 2013, 46, 81; R. Hilty, K. Köklü & F. Hafenbrädl (2013), Software Agreements: Stocktaking and Outlook – Lessons from the UsedSoft v. Oracle Case from a Comparative Law Perspective, IIC 2013, 263, 284; against OLG Hamm GRUR 2014, 853 – Hörbuch-AGB; M. Stieper (2012), Anmerkung zu EuGH – Usedsoft, ZUM 2012, 668, 670.

⁴⁵ M. Stieper (2012), Anmerkung zu EuGH – Usedsoft, ZUM 668, 670; H. Zech (2014), Lizenzen für die Benutzung von Musik, Film und E-Books in der Cloud, ZUM 2014, 3, 9.

 ⁴⁶ For an overview see A. Dietz (1995), in F.-K. Beier et al. (Eds.), Urhebervertragsrecht, pp. 1–50.
 ⁴⁷ M. Lehmann (1986), Unfair Use of and Damage to the Reputation of Well-Known Marks, Names and Indications of Source in Germany: Some Aspects of Law and Economics, IIC 1986, 746, 761.

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information about the quality and prestige of a product to the consumer. The ability of consumers to correctly distinguish between products is a condition for the functioning of markets. At least factually, trade mark protection benefits producers, consumers and the general public. Trade marks allow producers to establish goodwill and to market their products effectively. They lower consumers' information costs⁴⁸ and protect them from the misallocation of resources. And in the public interest they prevent a market failure which Akerlof famously termed "market for lemons".⁴⁹ when consumers cannot distinguish properly between products, they will not spend money on quality products, because their quality expectation may be disappointed. In this situation there is no point for producers to invest in quality, hence only low-quality products—"lemons"—will survive.

For these reasons trade mark law could be regarded as a part of consumer protection law.⁵⁰ This view, however, is far from undisputed. The Europeanisation of trade mark law has been characterised as a process of emancipation, during which trade marks have lost their roots in unfair competition law and become full intellectual property rights. One important step on this way was the introduction of free assignment of trade marks without the underlying business, now made mandatory by Article 21 TRIPS. Such an assignment may create consumer confusion, but when the Trade Marks Directive and the Community Trade Mark Regulation were drafted it became the prevailing view that such confusion should properly dealt with by unfair competition law. Hence is often said that trade mark law only protects right owners, whereas consumer protection is just a reflex, a factual side-effect.⁵¹ This approach, however, does not do justice to the functions of trade marks. The Max Planck Trade Mark Study convincingly proposes introducing a recital into European trade mark law according to which trade mark law protects owners, consumers and the general public.⁵²

⁴⁸ See, for example, Ty Inc. v. Perryman, 306 F.3d 509, 510 (7th Cir. 2002); S. Dogan & M. Lemley (2004), Trademarks and Consumer Search Costs on the Internet, 41 Hous. L. Rev. 2004, 777, 786–789.

⁴⁹ G.A. Akerlof (1970), The Market for Lemons: Quality Uncertainty and the Market Mechanism, 84 Q.J. Econ. 1970, 488.

⁵⁰ See WIPO (1982), The Role of Industrial Property Law in the Protection of Consumers, WIPO DOC CORP/III/1; J. Drexl (1998), Die wirtschaftliche Selbstbestimmung des Verbrauchers, pp. 595, 628–629.

⁵¹ A. Kraft (1980), Verbraucherschutz im Markenrecht, GRUR 1980, 416; see also the references given by J. Drexl (1998), Die wirtschaftliche Selbstbestimmung des Verbrauchers, pp. 593–594; F. Henning-Bodewig & A. Kur (1988), Marke und Verbraucher, pp. 211, 225; A. Sattler (2015), Emanzipation und Expansion des Markenrechts, pp. 372–381.

⁵² Max Planck Institute (2011), Study on the Overall Functioning of the European Trade Mark System, paras. 1.50–1.51.

3.4.2 The Extended Protection of Well-Known Marks

In recent decades, trade mark law has expanded beyond its core function of preventing consumer confusion. Article 16(3) TRIPS obliges the member states to protect trade marks against the use for dissimilar goods, "provided that use of that trademark in relation to those goods or services would indicate a connection between those goods or services and the owner of the registered trademark and provided that the interests of the owner of the registered trademark are likely to be damaged by such use". European law goes well beyond this obligation by protecting well-known marks not only against dilution, but also against misappropriation. According to Article 16(1) TRIPS, in the case of the use of an identical sign for identical products, as risk of confusion shall be presumed. Again, European law goes further. The CJEU has held that the "double identity" provisions of the Trade Marks Directive and the Community Trade Mark Regulation protect not only the origin function, but also the communication, quality, advertising and investment functions.⁵³ Hence the "double identity" provision can apply to referential uses, i.e. uses of another traders mark in order to correctly identify the other trader's goods.54

These extensions are not justified by any consumer interest. They protect trade values against dilution and misappropriation. The European cases on referential use even have the potential of unduly restricting free speech. It is not easy to find a justification for this. Market transparency is not affected when there is no confusion, and there is no need to create incentives for the establishment of goodwill. There have been attempts to justify at least anti-dilution laws by consumer interests, 55 but these attempts have met with forceful criticism. 6 There is the risk that an unjustified extension of trade mark protection sails under the friendly flag of consumer protection.

3.4.3 Trade Marks and Unfair Competition

Trade mark law is closely related to unfair competition law. According to Article $10^{\rm bis}(3)$ TRIPS, causing confusion is a typical act of unfair competition. Like trade mark law, unfair competition law was initially seen as a part of industrial property law, as its inclusion into the Paris Convention shows. Meanwhile, however, consumer protection has become an integral part of unfair competition law in countries

⁵³ ECJ, L'Oréal v. Bellure, C-487/07, EU:C:2009:378, para. 58.

⁵⁴ For example in the case of comparative advertising, see ibid., para. 53; see the criticism by A. Kur, L. Bently & A. Ohly (2009), Sweet Smells and a Sour Taste – The ECJ's L'Oréal decision; M.E. Paulus (2014), Markenfunktionen und referierende Benutzung, pp. 132–140, 174–182.

⁵⁵ Ty Inc. v. Perryman, 306 F.3d 509, 511 (7th Cir. 2002); S. Dogan & M. Lemley (2004), Trademarks and Consumer Search Costs on the Internet, 41 Hous. L. Rev. 2004, 777, 790–792.

⁵⁶ R. Tushnet (2008), Gone in Sixty Milliseconds: Trademark Law and Cognitive Science, 86 Tex. L.R. 2008, 507–568.

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such as Germany, Spain or Sweden, which adopt a monistic approach and grant protection against unfair competition in one single act which protects competitors, consumers and the general public alike. In European unfair competition law, consumer protection has moved to the foreground. The Unfair Commercial Practices Directive (UCPD)⁵⁷ has fully harmonised the member states' legal provisions on unfair competition in business-to-consumer relations. The UCPD defines misleading and aggressive practices as acts of unfair competition. Acts which cause confusion are explicitly mentioned as a sub-category of misleading practices in Article 6(2) UCPD. While trade marks can only be enforced by their owners, the UCPD allows the member states to provide consumer organisations or individual consumers with a right of action.

In most cases the interests of trade mark owners and consumers will coincide. But sometimes acts which are permitted by trade mark law may mislead consumers. In these cases consumer protection as provided by Article 6(2) UCPD may conflict with the legitimate interests of the trade mark owner. A recent German case⁵⁸ provides an interesting example. There is a Hard Rock Café in the city centre of Heidelberg. But it is not a member of the Hard Rock Group, which holds the trade mark rights in the name and logo of the Hard Rock Café, and the owner has not taken out a licence. The restaurant was established in 1978, well before the trade marks were registered in Germany. Due to the principle of territoriality, the owner of the Heidelberg Hard Rock Café is not an infringer. He has the older rights in Germany, and since the right owner did not take action before 1993, its claims are barred by the principles of acquiescence. Nevertheless many consumers, especially tourists who do not know the story of the restaurant, are confused into thinking that the Heidelberg café is "genuine". The concept of consumer confusion adopted by trade mark law is normative.⁵⁹ Confusion is determined on the basis of abstract criteria, and in some instances the law is prepared to tolerate some degree of confusion in the light of countervailing interests: the freedom of the state of the art underlies the exclusion of functional features from protection, the principles of priority allow the owner to enforce his or her rights against younger marks regardless of the consumer perception, and descriptive and some referential uses must remain free for the sake of competition. In all of these situations the question arises whether the same restrictions apply to consumer protection against misleading practices. The UCPD neither contains an explicit reference to trade mark law nor

⁵⁷ See Article 2(1) of Directive 2011/83/EU on consumer rights, OJ L 304/64 of 22.11.2011; Article 2(a) of the Unfair Commercial Practices Directive 2005/29/EC, OJ L 149/22 of 11.6.2005. ⁵⁸ BGH GRUR 2013, 1161 – Hard Rock Café.

⁵⁹ Under a traditional analysis the tests of confusion in trade mark law and unfair competition law are different: Trade mark law adopts a more abstract and normative viewpoint, whereas unfair competition law takes into account all the circumstances of the case. The CJEU, however, has recently shown the tendency to adopt one single approach. See A. Ohly (2014), Interfaces between Trade Mark Protection and Unfair Competition Law: Confusion about Confusion and Misconceptions about Misappropriation?, in N. Lee et al. (Eds.), Intellectual Property, Unfair Competition and Publicity, pp. 33, 40–47.

an exception which would allow balancing the consumer interest against countervailing interests. Nevertheless such a balancing exercise will have to take place. ⁶⁰ Neither intellectual property nor consumer protection is absolute. They jointly provide the legal framework for markets, and they must be seen in relation to one another and to the other fields of law which regulate markets, for example antitrust law.

4 Conclusion

Sometimes consumer interests are protected *by* intellectual property law. Trade mark law plays an important role in providing the consumer with information he or she needs for taking an informed decision. Its role in the protection of consumer interests is more than a mere factual reflex, and should be openly acknowledged. In a more general sense consumer and user interests are one factor in the general welfare balance underlying intellectual property law.

But consumers may also need protection *against* intellectual property. When buying digital goods, the consumer is often exposed to standard terms and to DRM systems restricting use. Since there is an inequality of bargaining power and an information asymmetry, consumers need protection. To some extent it is already afforded by unfair contract terms law, but there may be a need for a "consumer copyright contract law". In a more general sense, intellectual property law may restrict the access of consumers to products which embody intangible subject-matter. Copyright law can be infringed by consumers doing private acts for private purposes. In the digital environment, copyright law has partly lost its balance to the disadvantage of consumer-users. Nevertheless user interests, as important as it is to give them due weight, should not be conflated with consumer interests.

While consumer interests matter in intellectual property law and policy, they are also instrumentalised by both sides. As "all of us are consumers", ⁶¹ we all have a great deal of sympathy for consumer interests. European law is committed to a "high level of consumer protection". ⁶² In the public debate, there is a certain tendency to give excessive weight to consumer interests. Hence there is a strong temptation for both intellectual optimists and pessimists to let IP policy arguments sail under the friendly flag of consumer policy. This chapter has attempted to unmask some spurious arguments. Consumer protection can neither justify the

⁶⁰ A possible starting point is the principle of proportionality recognised by Article 13 UCPS, see A. Ohly (2014), Die Interessenabwägung im Rahmen des Irreführungsverbots und ihre Bedeutung für die Wertungseinheit von Lauterkeits- und Kennzeichenrecht, in W. Büscher et al. (Eds.), Festschrift für Joachim Bornkamm zum 65. Geburtstag, pp. 423–442; R. Sack (2014), Irreführungsverbot und Interessenabwägung in der deutschen Rechtsprechung, GRUR 2014, 609–620.

⁶¹ J.F. Kennedy (1962), Special Message to the Congress on Protecting the Consumer Interest.

⁶² See supra, Sect. 2.1.

extended protection of well-known trade marks nor strict anti-counterfeit legislation outside the area of trade mark confusion. On the other hand the consumer interest in cheap or even free access to technology products or digital works does not necessarily trump the producers' interest in maximising their profit.

But despite this note of scepticism, this chapter has also tried to show that consumer interest considerations have rightly entered the agenda of intellectual property law and policy. Articles 7 and 8 of the TRIPS Agreement provide a basis for taking them into account when interpreting the Agreement.

References

- Akerlof, G.A. (1970), The Market for Lemons: Quality Uncertainty and the Market Mechanism, 84 Q.J. Econ. 1970, 488, Cambridge (MA): MIT Press Journals
- Barton, J.H. (2001), The Economics of TRIPS: International Trade in Information-Intensive Products, 33 Geo. Wash. Int'l L.R. 2001, 473, Washington: The George Washington International Law Review
- Blair, R.D. & Cotter, T.F. (2005), Intellectual Property Economic and Legal Dimensions of Rights and Remedies, Cambridge: Cambridge University Press
- Blakeney, M. (2009), International Proposals for the Criminal Enforcement of Intellectual Property Rights: International Concern with Counterfeiting and Piracy, IPQ 2009, 1, London: Sweet & Maxwell
- Bork, R.H. (1978), The Antitrust Paradox, New York: Free Press
- Ch. Geiger, J. Griffiths & R. Hilty (2008), Declaration: A Balanced Interpretation of the "Three-Step Test" in Copyright Law, 39 IIC 2008, 707, available at: http://www.ip.mpg.de/en/news/declaration_on_the_three_step_test.html (accessed 20 May 2015)
- Drexl, J. (1998), Die wirtschaftliche Selbstbestimmung des Verbrauchers, Tübingen: Mohr Siebeck
- Dietz, A. (1995), in F.-K. Beier et al. (Eds.), Urhebervertragsrecht, München: C. H. Beck
- Dogan, S. & Lemley, M. (2004), Trademarks and Consumer Search Costs on the Internet, 41 Hous. L. Rev. 2004, 777, Houston: Houston Law Review
- Elkin-Koren, N. (2007), Making Room for Consumers under the DCMA, 22 Berk. J.L. & Tech. 2007, 1119, Berkeley: UC Berkeley School of Law
- Ginsburg, J.C. (1995), Putting Cars on the "Information Superhighway": Authors, Exploiters, and Copyright in Cyberspace, 95 Colum. L. Rev. 1995, 1466, New York: Columbia University School of Law
- Gowers Review of Intellectual Property (2009), available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/228849/0118404830.pdf (accessed 20 May 2015)
- Guellec, D. & van Pottelsberghe de la Potterie, B. (2007), The Economics of the European Patent System, Oxford: Oxford University Press
- Grützmacher, M. (2013), Endlich angekommen im digitalen Zeitalter!?, 5 ZGE 2013, 46, Tübingen: Mohr Siebeck
- Haberstumpf, H. (2012), Der Handel mit gebrauchter Software im harmonisierten Urheberrecht, CR 2012, 561, Köln: Otto Schmidt
- Henning-Bodewig, F. & Kur, A. (1988), Marke und Verbraucher. Vol. I., Weinheim: VCH
- Hilty, R., Köklü, K. & Hafenbrädl, F. (2013), Software Agreements: Stocktaking and Outlook Lessons from the UsedSoft v. Oracle Case from a Comparative Law Perspective, IIC 2013, 263, Munich/Berlin: C.H. Beck/Springer
- Hugenholtz, B. (2000), Caching and Copyright: The Right of Temporary Copying, EIPR 2000, 482, London: Sweet & Maxwell

- Kennedy, J.F. (1962), Special Message to Congress on Protecting Consumer Interest, 15 March 1962, available at: http://www.jfklibrary.org/Asset-Viewer/Archives/JFKPOF-037-028.aspx (accessed 20 May 2015)
- Kraft, A. (1980), Verbraucherschutz im Markenrecht, GRUR 1980, 416, Munich: C.H. Beck
- Kreutzer, T. (2011), Verbraucherschutz im Urheberrecht, available at: http://www.vzbv.de/sites/default/files/mediapics/urheberrecht_gutachten_2011.pdf (accessed 20 May 2015)
- Kur, A., Bently, L. & Ohly, A. (2009), Sweet Smells and a Sour Taste The ECJ's L'Oréal decision, available at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1492032 (accessed 20 May 2015)
- Landes, W.M. & Posner, R.A. (2003), The Economic Structure of Intellectual Property Law, Cambridge (MA): Belknap Press
- Lehmann, M. (1986), Unfair Use of and Damage to the Reputation of Well-Known Marks, Names and Indications of Source in Germany: Some Aspects of Law and Economics, IIC 1986, 746, Munich/Berlin: C.H. Beck/Springer
- Lincoln, A. (1858–1859), Lectures on Discoveries and Inventions, available at: http://www.abrahamlincolnonline.org/lincoln/speeches/discoveries.htm (accessed 20 May 2015)
- Mackenrodt, M.-O. (2015), Technologie statt Vertrag, Tübingen: Mohr Siebeck
- Max Planck Institute (2011), Study on the Overall Functioning of the European Trade Mark System, available at: http://www.ip.mpg.de/files/pdf2/mpi_final_report_with_synopsis.pdf (accessed 20 May 2015)
- Merges, R.P. & Kuhn, J.M. (2009), An Estoppel Doctrine for Patented Standards, 97 Cal. L. Rev. 2009, 1–50, Berkeley; UC Berkeley School of Law
- Ohly, A. (2012), Counterfeiting and Consumer Protection, in C. Geiger (Ed.), Criminal Enforcement of Intellectual Property, Cheltenham: Edward Elgar
- Ohly, A. (2014), Die Interessenabwägung im Rahmen des Irreführungsverbots und ihre Bedeutung für die Wertungseinheit von Lauterkeits- und Kennzeichenrecht, in W. Büscher et al. (Eds.), Festschrift für Joachim Bornkamm zum 65. Geburtstag, München: C. H. Beck
- Ohly, A. (2014), Interfaces between Trade Mark Protection and Unfair Competition Law: Confusion about Confusion and Misconceptions about Misappropriation?, in: N. Lee et al. (Eds.), Intellectual Property, Unfair Competition and Publicity, Cheltenham: Edward Elgar
- Ohly, A. (2014), Urheberrecht in der digitalen Welt, Gutachten F zum 70. Deutschen Juristentag, München: C.H. Beck
- Ohly, A. (2015), Exhaustion of Rights: A Concept for the Digital World?, in D. Beldiman (Ed.), Innovation, Competition, Collaboration, Cheltenham: Edward Elgar
- Paulus, M.E. (2014), Markenfunktionen und referierende Benutzung, Tübingen: Mohr Siebeck
- Picht, P. (2014), Standardsetzung und Patentmissbrauch Schlagkraft und Entwicklungsbedarf des europäischen Kartellrechts, GRUR Int. 2014, 1, Munich: C.H. Beck
- Reich, N. (2003), Verbraucherinteressen und gewerblicher Rechtsschutz, in N. Reich and H.-W. Micklitz (Eds.), Europäisches Verbraucherrecht, 4th ed., Baden-Baden: Nomos
- Reyes-Knoche, S. (2009), in P.-T. Stoll, J. Busche & K. Arend (Eds.), WTO-Trade Related Aspects of Intellectual Property Rights, Leiden, Boston: Martinus Nijhoff Publishers
- Sack, R. (2014), Irreführungsverbot und Interessenabwägung in der deutschen Rechtsprechung, GRUR 2014, 60
- Sattler, A. (2015), Emanzipation und Expansion des Markenrechts, Tübingen: Mohr Siebeck
- Senftleben, M. (2004), Copyright, Limitations and the Three-Step Test, The Hague, London, New York: Wolters Kluwer
- Stieper, M. (2012), Anmerkung zu EuGH Usedsoft, ZUM 2012, 668, Baden-Baden: Nomos
- Toeffler, A. (1980), The Third Wave, New York: Bantam Books
- Tushnet, R. (2008), Gone in Sixty Milliseconds: Trademark Law and Cognitive Science, 86 Tex. L. Rev. 2008, 507, Austin: University of Texas School of Law
- Tushnet, R. (2008), User-Generated Discontent: Transformation in Practice, 31 Colum. J.L. & Arts 2008, 497, New York: Columbia University School of Law

- Ullrich, H. (2010), Patents and Standards A Comment on the German Federal Supreme Court Decision Orange Book Standard, IIC 2010, 337, Munich/Berlin: C.H. Beck/Springer
- Werden, G.J. (2011), Consumer Welfare and Competition Policy, in J. Drexl, W. Kerber & R. Podszun (Eds.), Competition Policy and the Economic Approach, Cheltenham: Edward Elgar
- WIPO (1982), The Role of Industrial Property Law in the Protection of Consumers, WIPO DOC CORP/III/1
- WHO (2006), Public Health, Innovation and Intellectual Property Rights, available at: http://www.who.int/intellectualproperty/documents/thereport/ENPublicHealthReport.pdf?ua=1 (accessed 20 May 2015)
- Zech, H. (2013), Vom Buch zur Cloud, 5 ZGE 2013, 368, Tübingen: Mohr Siebeck
- Zech, H. (2014), Lizenzen für die Benutzung von Musik, Film und E-Books in der Cloud, ZUM 2014, 3, Baden-Baden: Nomos

TRIPS and Corporate Social Responsibility: Unethical Equals Unfair Business Practices?

Frauke Henning-Bodewig

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Abstract The overall purpose of TRIPS is not only to further competition but also to further fair competition. This is, however, done rather indirectly through the implementation of IP rights and the determination of their scope and limitations. Apart from this, TRIPS does not monitor acts in trade and commerce under the

Prof. Dr. Frauke Henning-Bodewig is Affiliated Research Fellow at the Max Planck Institute for Innovation and Competition, Munich, and Honorary Professor at the University of Erlangen, Nürnberg.

F. Henning-Bodewig (⋈)

Max Planck Institute for Innovation and Competition, Munich, Germany e-mail: fhb@ip.mpg.de

aspect of commercial fairness. In particular, TRIPS does not deal with commercial practices in connection with the negative side effects of a globalized economy, which, for instance, outsources production to countries with laxer standards in the field of labour, environment, and human rights. If at all, this is regarded as the domain of Article $10^{\rm bis}$ of the Paris Convention, which expressly prohibits "any act contrary to honest practices in industrial or commercial matters".

This paper addresses the issue of whether Article 10^{bis} of the Paris Convention is part of TRIPS—or whether TRIPS could at least be interpreted in such a manner as to (directly or indirectly) include a general prohibition of unfair competition. As a second step it addresses the question of whether the obligation to combat unfair commercial practices under the Paris Convention (and possibly also under TRIPS) in its turn can be extended to cases where a company disregards its own pledges of commitment to so-called "corporate social responsibility". This relatively new strategy used frequently by multinational companies tries to establish a favourable image in the public perception—typically by more or less explicitly pledging to respect certain principles of "business ethics".

Can non-compliance with one's own standards of corporate social responsibility, often presented on the company's website, be contrary to "honest practices" pursuant to Article 10^{bis} of the Paris Convention? And if so, can this in its turn (also) be in breach of TRIPS?

1 Introduction

Corporate social responsibility (CSR) is often perceived as a voluntary tool of business to establish a favourable public image. From the company's point of view, voluntary standards are subjected only to voluntary compliance. Court cases in different countries indicate, however, that non-compliance with one's own CSR standards can also entail legal consequences. As will be shown under Sect. 3, at least in specific incidences the "corporate right to lie" may collide with legal principles laid down in national regulations regarding unfair competition, unfair trade practices, etc. Non-compliance may also be against regulations in regional agreements, for instance the European Directive 2005/29/EC on Unfair Commercial Practices.

At first glance, no comparable legal basis can be found in TRIPS. TRIPS aims at achieving commercial fairness through the implementation of IP rights and the definition of their scope and limitations. TRIPS neither contains a general prohibition of unfair competition (or unfair trade practices) nor does it regulate specific phenomena like CSR. TRIPS does not refer to the production process, human

¹ This catch phrase was sometimes used to sum up the issues of the Kasky v. Nike case; discussed infra under Sect. 3.1.

rights, social conditions, the combating of corruption, etc. On the other hand, TRIPS is built on the Paris Convention (PC)—the so-called "Paris-plus approach"—and Article 10^{bis} PC itself does expressly prohibit "acts of unfair competition". In a world of globalisation and fierce competition, one has to ask whether these "honest practices" also encompass compliance with CSR standards, at least if they are used as a marketing tool. If this can be answered in the affirmative, the connection with TRIPS would be of particular interest because the Paris Convention may provide for an adequate basis for protection but is somewhat hesitant as to enforcement. In order to make compliance with "honest practices" (and CSR) more realistic, Article 10^{bis} PC would have to be (directly or indirectly) included in TRIPS and its comparably strict enforcement instruments.²

2 Corporate Social Responsibility: Definition and Legal Nature

2.1 Definition of CSR

One of the difficulties of dealing with the legal consequences of a phenomenon like CSR stems from the problem that there is *no clear-cut definition* of the incriminated behaviour. To begin with, the term corporate social responsibility—or corporate responsibility—is used rather broadly to describe the overall approach of a business to its commercial behaviour. It often indicates a strategy that does not directly deal with the "number one"-aim of all business, namely profit maximization, but rather with the *social or ecological standards of the production process*. According to a recent EU document.

² These questions are, e.g., discussed by T. Cottier & G. Wermelinger (2014), Implementing and Enforcing Corporate Social Responsibility: The Potential of Unfair Competition Rules in International Law, in R. Hilty & F. Henning-Bodewig (Eds.), Corporate Social Responsibility – Verbindliche Standards des Wettbewerbs?, pp. 81–99; Ch. Riffel (2016), The Protection Against Unfair Competition in World Trade: Implementations of the TRIPS-Agreement and the Paris Convention for the Promotion of Industrial Property; F. Henning-Bodewig (2013), TRIPS, in F. Henning-Bodewig (Ed.), International Handbook on Unfair Competition, pp. 30–36; Ch. Wadlow (2011), The Law of Passing-Off: Unfair Competition by Misrepresentation, paras. 2-009 et seq.; R. Mares (2008), The Dynamics of Corporate Social Responsibility.

³ See G. Jackson (2014), Socio-Political Perspective on CSR, in R. Hilty & F. Henning-Bodewig (Eds.), p. 19–23; R. Podszun (2014), Corporate Social Responsibility-Standards, in R. Hilty & F. Henning-Bodewig (Eds.), Corporate Social Responsibility – Verbindliche Standards des Wettbewerbsrechts?, pp. 51–81; M. Kerr, R. Janda & Ch. Pitts (2009), Corporate Social Responsibility; J. Malbon, Ch. Lawson & M. Davison (2014), The WTO Agreement on Trade Related Aspects of Intellectual Property Rights.

⁴ European Commission, A renewed EU Strategy 2011–14 for Corporate Social Responsibility, COM (2001) 681 of October 3, 2011.

CSR at least covers human rights, labour and employment practices (such as training, diversity, gender equality and employee health and well-being), environmental issues (such as biodiversity, climate change, resource efficiency, life-source assessment and pollution prevention), and combating bribery and corruption. Community involvement and development, the integration of disabled persons, and consumer interests, including privacy, are also part of the CSR agenda. The promotion of social and environmental responsibility through the supply chain, and the disclosure of non-financial information, are recognised as important cross-cutting issues.

The definition given, for instance, by the "World Business Council for Sustainable Development" is even broader (and vaguer)⁵: "Corporate social responsibility is the commitment of business to contribute to sustainable economic development, working with employees, their family, the local community and society at large to improve their quality of life."

In my opinion, roughly two forms of CSR can be distinguished:

- "Official" CSR aims at encouraging governments to introduce appropriate legislation in the field of labour, human rights, protection of the environment etc. This form of CSR belongs to the even broader field of "Good Governance" and often originates within international organisations. Examples are standards established by the "International Labour Organisation" (ILO) of the OECD, the "Global Compact" of the UN or the "Guidelines for Multinational Enterprises" of the OECD.
- "Private" CSR standards are established by individual enterprises themselves.
 These guidelines typically lay down the main principle of how the business in question ought to be conducted, and which rules ought to be respected by the management and the employees.

There are, of course, *interfaces* between both forms of CSR—for instance, if an enterprise refers in its own CSR to "official" CSR, commits itself to respecting ILO-standards, or claims to be a member of a certain Code of Conduct established by the OECD, the WWF or other organizations.

To complicate matters, CSR often overlaps with (or is mentioned in the context of) other concepts. 7

 "Compliance" usually means the respect of existing laws, while CSR refers to not legally regulated business ethics. However, in larger enterprises, the

⁵ World Business Comment for Sustainable Development, Corporate Responsibility, 2000, 10; discussed in R. Podszun (2014), Corporate Social Responsibility-Standards, in R. Hilty & F. Henning-Bodewig (Eds.), Corporate Social Responsibility: Verbindliche Standards des Wettbewerbsrechts?, p. 53.

⁶ These and other international voluntary initiatives are discussed in detail by M. Kerr, R. Janda & Ch. Pitts (2009), Corporate Social Responsibility, p. 319 (but also by the authors cited supra in fns. 2 and 3).

⁷ See R. Podszun (2014), Corporate Social Responsibility-Standards, in R. Hilty & F. Henning-Bodewig (Eds.), Corporate Social Responsibility: Verbindliche Standards des Wettbewerbsrechts?, p. 53 and G. Jackson (2014), Socio-Political Perspective on CSR, in R. Hilty & F. Henning-Bodewig (Eds.), pp. 19 et seq.

- company's own CSR is often dealt with by the "Compliance Department" that quite generally watches over the observance of legal or self-imposed rules.
- "Corporate Governance" means good leadership of enterprises and is often used in a socio-political context.
- "Soft law" is sometimes (but not consistently) used for guidelines established by organizations like OECD, UN, etc. They typically can be "enforced" through sanctions of these organizations themselves but not, at least not directly, by the laws of the state.
- "Codes of Conduct" are, for instance, defined by Article 2(d) of the European Directive 2005/29/EC⁹ as "an agreement or set of rules not imposed by law, regulation or administration provision of a Member State which defines the behaviour of traders who undertake to be bound by the code in relation to one or more particular commercial practices or business sectors".

2.2 Is CSR Legally Binding?

It is no wonder that the legal nature of CSR is equally unclear, which adds to the problem of assessing a multifaceted phenomenon like CSR under the much stricter principles based in law. CSR commitments are often described as voluntary "guidelines" or at best "soft law". Accordance exists only insofar as a *direct enforcement* of CSR standards by courts or authorities is considered possible only if there is a legal basis which provides for such a legally binding character. Although there are some attempts going in this direction in national law (discussed *infra* under Sect. 6.1) this is to my knowledge an exception until now. Consequently enforcement of "voluntary standards" (like CSR)—standards not mandatory required by law—is regarded as a (sole) matter of public pressure—so-called "naming and shaming", for instance by the media, in internet groups, or by Non-Governmental Organizations (NGOs).

This is, however, only half-true. It goes without saying that while business is required to respect existing legal regulations or, in some countries, the principles of

⁸ R. Podszun (2014), Corporate Social Responsibility-Standards, in R. Hilty & F. Henning-Bodewig (Eds.), Corporate Social Responsibility: Verbindliche Standards des Wettbewerbsrechts?, p. 54.;
G. Mullerat (2005), Corporate Social Responsibility: The Coroporate Governance of the 21st Century, pp. 279 ff.

⁹ Directive 2005/29/EC of the European Parliament and of the Council of 11.05.2005 concerning unfair business-to-consumer commercial practices in the internal market, OJ 2005 L.149/22.

¹⁰The legal nature of CSR and, in particular, possible ways of enforcing CSR are discussed by T. Cottier & G. Wermelinger (2014), Implementing and Enforcing Corporate Social Responsibility: The Potential of Unfair Competition Rules in International Law, in R. Hilty & F. Henning-Bodewig (Eds.), Corporate Social Responsibility: Verbindliche Standards des Wettbewerbs?, pp. 81–99; Ch. Riffel (2016), The Protection Against Unfair Competition in World Trade: Implementations of the TRIPS-Agreement and the Paris Convention for the Promotion of Industrial Property (2016).

equity and common law, it is not required to commit itself to *additional standards* of fair market behaviour. It is furthermore correct that "unethical" business behaviour, e.g. the production in developing countries under unacceptable labour conditions, is sometimes successfully attacked by the public. There are, however, also drawbacks to this approach of "naming and shaming". To name just a few: The public may not be aware of those incidences, may not be interested in them, NGOs may be too uninfluential to be taken seriously, etc. And even from an enterprise's point of view, certain forms of "scandalisation" may spin out of control, can be dangerous to the image and thus less preferable to the more predictable legal sanctions.

In short, public pressure does not necessarily make legal enforcement superfluous.

The most efficient way to establish legal consequences would be, of course, an explicit incorporation of CSR principles, in particular concerning environmental and human rights issues, into the WTO regime itself. However, until now all suggestions going in this direction were to no avail. 11 National law may regulate specific aspects of CSR, e.g. labour conditions, and in 2015 in France a proposition of law was introduced that would extend the respect of certain CSR-principles also to the production process abroad (discussed *infra* under Sect. 4.4). These(attempts of) statutory regulation aim at ensuring certain ethical business standards but do not answer the question whether there is a general obligation to comply with voluntarily established standards of market behaviour. The only way to endow these voluntary commitments with legal consequences seems: to be a subsumtion under the concepts of fair behaviour already in force in national, regional or international law. 12 In particular, legislation or legal principles regarding competition, trading practices, etc. could be suitable. CSR could thus indirectly become "legally binding". The following examples taken from two countries with quite different approaches to regulation, the USA and Germany, and a Regional Agreement like the European Union may demonstrate that this is a realistic way of enforcing at least specific forms of CSR. 13

¹¹ M. Kerr, R. Janda & Ch. Pitts (2009), Corporate Social Responsibility, pp. 319–321.

¹² R. Podszun (2014), Corporate Social Responsibility-Standards, in R. Hilty & F. Henning-Bodewig (Eds.), Corporate Social Responsibility: Verbindliche Standards des Wettbewerbsrechts?, pp. 51–81; B. Spiesshofer (2014), Wirtschaft und Menschenrechte – rechtliche Aspekte der Corporate Social Responsibility, NJW 2014, 2473–2479. See also M. Cherry & J. Sneirson (2011), Beyond Profit: Rethinking Corporate Social Responsibility and Greenwashing after the BP Oil Disaster, 85 Tul. L. Rev. 2013, 1028–1030; V. Besmer (2000), The Legal Character of Private Codes of Conduct: More Than Just a Pseudo-Formal Gloss on Corporate Social Responsibility, 2 Hastings Bus. L.J. 2000, 279–306.

¹³ As to the situation in Belgium and France see J. Stuyck (2014), Corporate Social Responsibility Standards and the Belgian and French Perspective, in R. Hilty & F. Henning-Bodewig (Eds.), Corporate Social Responsibility: Verbindliche Standards des Wettbewerbsrechts?, pp. 225–233; in China: Y. Bu & B. Roth (2014), Corporate Social Responsibility and Lauterkeitsrecht aus asiatischer Sicht, in R. Hilty & F. Henning-Bodewig (Eds.), Corporate Social Responsibility: Verbindliche Standards des Wettbewerbsrecht?, pp. 213–225.

3 CSR Under US, German and European Law

3.1 Kasky v. Nike Inc. (USA)

Kasky v. Nike Inc. 14 was decided by the California Supreme Court in 2003. Kasky, a consumer activist, had publicly reproached Nike for manufacturing its products in developing countries under conditions that in the US would have violated labour standards and fundamental rights. The actual working conditions were furthermore not in accordance with Nike's own CSR pledges of "fairness". Nike defended itself with incorrect arguments in public statements and letters. Kasky argued that this was a violation of the California Unfair Competition Act, which defines unfair competition as "any unlawful, unfair or fraudulent business act or practice and unfair and misleading advertising ...". This was dismissed by the California Court of Appeal on the grounds of the protection of free speech. However, the Supreme Court of California reversed this judgment and held the discrepancy between Nike's actual commercial practices and its own public pledges of fair behaviour to be a violation of the Act. The case was settled, and it is left somewhat open under which conditions the California Act exactly prohibits incorrect CSR claims. There is, however, no doubt that non-compliance with one's own CSR pledges and the defence of this in public statements can be regarded as "commercial speech" and thus within the scope of application of the California Unfair Competition Act.

3.2 LIDL (Germany)

LIDL which operates a chain of supermarkets in Germany had referred to the Business Social Compliance Initiative ("BSCI standards"), which are guidelines based on ILO. On its website, LIDL had stated that "in contrast to other supermarkets, LIDL insists that its supplier[s] comply with fundamental social standards". In advertising brochures, LIDL had claimed to "campaign worldwide for fair working conditions" and to "only award non-food contracts to selected producers and suppliers who have already proved they have actively incorporated social responsibility".

¹⁴ Kasky v. Nike, Inc., 45 P 3d 243 (Cal. 2002); Kasky v. Nike, Inc., 539 U.S. 654 (2003). The Kasky v. Nike case is discussed in M. Kerr, R. Janda & Ch. Pitts (2009), Corporate Social Responsibility, pp. 276–278; A. Peukert (2014), Die Rechtsrelevanz der Sittlichkeit der Wirtschaft – am Beispiel der Corporate Social Responsibility im US-Recht, in R. Hilty, R. & F. Henning-Bodewig (Eds.), Corporate Social Responsibility: Verbindliche Standards des Wettbewerbsrechts?, pp. 233–261.

¹⁵ California Unfair Competition Act, Business and Professional Code, Cal. Bus & Prof. Code § 17200.

Since the products in question were actually not produced in accordance with BSCI-standards, a consumer protection agency brought an action for injunctive relief on the basis on Section 5 of the German Act Against Unfair Competition, which prohibits deceptive or deceptively incomplete commercial practices. ¹⁶ The Court did not render a judgment because LIDL signed a cease-and-desist declaration and withdrew all references to "fair labour" conditions. It was, however, generally assumed that LIDL would have lost in court, because its claims of "fairness" were specific enough to create a concrete perception of business behaviour in the eyes of the consumers; consequently these (objectively incorrect) statements would have been regarded as deceptive indications prohibited by German unfair competition law. ¹⁷

The *LIDL* case caused special interest in Germany because its (predicted) outcome was regarded as a differentiation from another famous case decided by the German Supreme Court as early as 1980. In the so-called *Asbest* case, ¹⁸ the court held that the mere act of marketing a product that was legally produced abroad but under conditions prohibited by German labour law (asbestos exposure) could not be considered as a violation of unfair competition law. Although the judges clearly disapproved of the defendant's behaviour, the exploitation of the gaps in national labour laws was regarded as a consequence of the global economy that cannot be counterbalanced by national unfair competition law.

The *LIDL* and *Asbest* cases differ insofar as LIDL had made a *specific claim* of fairness while the defendant in the *Asbest* case had remained silent.

3.3 European Law

Although cases involving CSR have not yet been decided on the grounds of European regulations, it should be mentioned that the European Directive 2005/29/EC on Unfair Commercial Practices would lead to a similar result as the expected outcome of the *LIDL* case in Germany. Firstly, the prohibition of misleading commercial actions in Article 6(1)(b) directly names as a possible point for

¹⁶Consumer Protection Agency Hamburg v. LIDL, filed at the Heilbronn District Court on April 6, 2010. The LIDL case is discussed by T. Cottier & G. Wermelinger (2014), Implementing and Enforcing Corporate Social Responsibility: The Potential of Unfair Competition Rules in International Law, in R. Hilty & F. Henning-Bodewig (Eds.), Corporate Social Responsibility: Verbindliche Standards des Wettbewerbs?, p. 89.

¹⁷ For a study of German unfair competition law see A. Böttcher & F. Henning-Bodewig (2013), Germany, in F. Henning-Bodewig (Ed.), International Handbook on Unfair Competition, pp. 231–261.

¹⁸ German Supreme Court (BGH), 09.05.1980 - I ZR 76/78 Asbest-Importe (OLG Hamburg), GRUR 1980, 858.

deception the "method . . . of manufacture". ¹⁹ In addition, the Directive emphasises the importance of Code of Conducts. The list of practices that "under all circumstances" are unlawful, qualifies as misleading:

- Falsely claiming to be a signatory to a code of conduct.
- Displaying a trust trade mark, quality mark or equivalent without having obtained the necessary authorisation.
- Claiming that a code of conduct has an endorsement from a public or other body which it does not have.
- Claiming that a trader (including his commercial practices) or a product has been approved, endorsed or authorised by a public or private body when he/it has not or making such a claim without complying with the terms of the approval, endorsement or authorisation.

- A. commercial practice shall be regarded as misleading if it contains false information
 and is therefore untruthful or in any way including overall presentation, deceives or is
 likely to deceive the average consumer, even if the information is factually correct, in
 relation to one or more of the following elements, and in either case causes or is likely to
 cause him to take a transactional decision that he would not have taken otherwise:
 - (a) the existence or nature of the product;
 - (b) the main characteristics of the product, such as its availability benefits, risks, execution, composition, accessories, after-sale customer assistance and complaint handling, method and date of manufacture or provision, delivery, fitness for purpose, usage, quantity, specification, geographical or commercial origin or the results to be expected from its use, or the results and material features of tests or checks carried out on the product;
 - (c) the extent of the trader's commitments, the motives for the commercial practice and the nature of the sales process, any statement or symbol in relation to direct or indirect sponsorship or approval of the trader or the produce
 - (d) the price or the manner in which the price is calculated, or the existence of a specific price advantage;
 - (e) the need for a service, part, replacement or repair;
 - (f) the nature, attributes and rights of the trader or his agent, such as his identity and assets, his qualifications, status, approval, affiliation or connection and ownership fo industrial, commercial or intellectual property rights or his awards and distinctions;
 - (g) the consumer's rights, including the right to replacement or reimbursement under Directive 1999/44/EC of the Europe Parliament and of the Council of 25 May 1999 on certain aspects of the sale of consumer goods and associated guarantees, or the risks he may face.
- 2. A commercial practice shall also be regarded as misleading if, in its factual context, taking account of all its features and circumstances, it causes or is likely to cause the average consumer to take a transactional decision that he would not have taken otherwise, and it involves:

¹⁹ The Directive (supra fn. 9) had to be implemented in all EU-states by 2008. Article 6(1) reads as follows:

4 Paris Convention: Is CSR of Importance for Article 10^{bis} PC?

The decisions named above clearly show that national law (and European law) can be applied to false or misleading CSR statements, in particular if these statements are made on the company's website, in public declarations or—the most obvious case—in advertising or marketing. This does not, however, answer the question whether this is also an issue of *international law*. As mentioned above, TRIPS does not contain any express prohibition of unfair commercial behaviour as such, let alone an explicit prohibition of false or misleading CSR. Consequently, CSR can only be relevant via Article 10^{bis} PC—which does not mention CSR either but at least prohibits acts of competition "contrary to honest practices". Article 10^{bis} PC thus provides for a legal basis similar to that of the national laws in many countries.²⁰

Consequently, as a first step, the role of CSR for the interpretation of Article $10^{\rm bis}$ PC has to be discussed, then, as a second step, the relevance of these principles for TRIPS has to be looked at.

4.1 Article 10^{bis} PC and Its General Principles

4.1.1 Text

Article 10^{bis} PC reads as follows:

- (1) The countries of the Union are bound to assure to nationals of such countries effective protection against unfair competition.
- (2) Any act of competition contrary to honest practices in industrial or commercial matters constitutes an act of unfair competition.
- (3) The following in particular shall be prohibited:
 - 1. all acts of such a nature as to create confusion by any means whatever with the establishment, the goods, or the industrial or commercial activities of a competitor;
 - 2. false allegations in the course of trade of such a nature as to discredit the establishment, the goods, or the industrial or commercial activities, of a competitor;
 - 3. indications or allegations the use of which in the course of trade is liable to mislead the public as to the nature, the manufacturing process, the characteristics, the suitability for their purpose, or the quantity, of the goods.

²⁰ For an in-depth study of unfair competition law in different countries see F. Henning-Bodewig (2013), International Handbook of Unfair Competition. This study not only discusses unfair competition law on the regional and international level but also national law in Australia, Austria, Brazil, Canada, China, France, Germany, Hungary, India, Italy, Japan, Lithuania, Netherlands, Poland, South Africa, Spain, Sweden, Switzerland, Turkey, United Kingdom, United States of America.

4.1.2 Autonomous Interpretation

Article 10^{bis} of the Paris Convention²¹ does not only reflect the point of view of one (or even several) countries but of all members of the Union. Consequently, it must be interpreted *autonomously*. The intent of the Convention, particularly embodied in its Articles 2 and 3, and the erected system of protection as such are of paramount importance. As to the interpretation of specific *terms*, the wording must be analysed according to the specific understanding and the objective of this provision and its context within the Paris Convention.

Autonomous interpretation is of special importance for provisions like Article $10^{\rm bis}$ PC, which leaves terms like "honest practices" deliberately open to interpretation, thus making it acceptable to countries with different legal traditions. On the other hand, Article $10^{\rm bis}$ PC itself and its context within the Paris Convention provides (as will be discussed under Sect. 4.4) for *some directives*. In addition, two seldom considered facts have to be taken into account²²:

- The law of the country where a conflict occurs will usually be an appropriate starting point. Although international, not national, standards are the benchmark, it will hardly ever be necessary for courts or authorities to research interpretation in the 174 states of the Union. It suffices if the national point of view is checked against the principles named below, in particular as the interested parties will point out possible differences between the views of their home country and the country where protection is sought.
- The principle of "autonomous interpretation" should not be confused with the question of the *specific legal requirements* that have to be met in order to obtain protection against unfair competition in a given country. If the law in the country where protection is sought complies with the minimum standard of the Paris Convention (which most countries do), the specific requirements of the national provision (or its interpretation by the courts or authorities) must be respected no matter whether the plaintiff is a national or a foreigner.²³

²¹ Art. 10^{bis} PC is discussed by S. Ladas (1930), The International Protection of Industrial Property; G. Bodenhausen (1968), Guide to the Application of the Paris Convention for the Protection of Industrial Property; Ch. Wadlow (2011), The Law of Passing-Off: Unfair Competition by Misrepresentation, paras. 2–009 et seq.; M. Pflüger (2011), in T. Cottier & P. Véron (Eds.), Concise International and European Law; M. Pflüger (2010), Der internationale Schutz gegen unlauteren Wettbewerb, pp. 106–158; F. Henning-Bodewig (1999), International Protection Against Unfair Competition, Art. 10^{bis} Paris Convention, TRIPS and WIPO Model Provisions, IIC 1999, 166–190; F. Henning-Bodewig (2009), International Unfair Competition Law, in R. Hilty & F. Henning-Bodewig (Eds.), Law Against Unfair Competition: Towards a New Paradigm in Europe?, pp. 53–61; R. Arnold (2013), English Unfair Competition Law, IIC 2013, 63–64.

²² F. Henning-Bodewig (2013), Interpretation of the Paris Convention, in: F. Henning-Bodewig (Ed.), International Handbook on Unfair Competition, pp. 17–19.

²³ The German Federal Supreme Court (BGH), 09.10.2008 - I ZR 126/06 Gebäckpresse (OLG Hamburg), GRUR 2009, 79, marginal no. 79, for instance held that Sect. 4 No. 9 of the German Act Against Unfair Competition in its interpretation by the courts grants protection against imitation only to those products that are well-known within Germany. The Supreme Court

On the other hand, autonomous interpretation plays a role in the determination of what is exactly encompassed by Article 10^{bis} PC. Since the *purpose of protection* is not expressly stated in Article 10^{bis}, the context within the framework of the Paris Convention is decisive. The repression of unfair competition is part of the protection of *industrial property*, consequently the primary intention of Article 10^{bis} PC is the strengthening of individual rights not public policy issues.

This does not mean that the public interest, in particular *consumer protection* is without importance to Article 10^{bis} PC. As is demonstrated by the express prohibition in Article 10^{bis}(3) PC of false assertions about one's own product, with its reference to the "public", Article 10^{bis} PC acknowledges the fact that acts of competition cannot be artificially separated into "B2C" and "B2B" practices.²⁴ In most cases, the interests of competitors and of consumers are *intertwined*. From the point of view of the Paris Convention no conflict between competitor's and consumer's interests arises in such cases of intertwined interests.

For *CSR* this means that any obligation *solely* based on consumer interests—e.g. an "information duty" that is not intertwined with a deceptive allegation and that cannot be regarded as (also) potentially harmful to competitors' interests—is not encompassed by Article 10^{bis} PC. The public may have a legitimate interest to know under which conditions products are produced, but such a general interest is protected under Article 10^{bis} PC only insofar as competitors' interests are involved too.

4.2 The Scope of Application: "Acts of Competition"

Article 10^{bis} PC is only applicable to "acts of competition" in "industrial or commercial matters", also described as acts done "in the course of trade". Any merely internal, private, social or political behaviour does not fall within the scope of the provision. In many countries, "free speech" communications enjoy strong constitutional protection and are distinguished from "commercial speech", which may also be constitutionally protected but to a lesser degree and which is often subjected to restrictions under unfair competition law.²⁵

consequently dismissed an action brought by a Chinese producer because the claimant's product was not known in Germany.

²⁴ It is sometimes argued that the prohibition of misleading practices introduced consumer protection as such into Article 10^{bis} PC. Since misleading practices are harmful to competitors as well (whose efforts are wrongly disregarded), and consequently consumers and competitors interests are intertwined, this seems doubtful.

²⁵ The German Federal Supreme Court (BGH), 12. 12. 2000–1 BvR 1762/95; 1 BvR 1787/95 - Benetton HIV Positive. GRUR 2001, 170 – Benetton HIV Positive held that commercial speech is constitutionally protected under Article 5 of the German Constitution which does not hinder the application of unfair competition law but influences the interpretation of its provisions.

In general, all "trade practices", "commercial practices", "market practices", etc. are within the scope of application of Article 10^{bis} PC. Even if they involve constitutionally protected commercial speech, their aim is *participation in competition*. Although Article 10^{bis} PC leaves the definition of the term "competition" to member states, the wording indicates that there has to be in a *competitive relation-ship* with another person or enterprise. How narrowly this "competitive relationship" is to be construed, and whether it requires a subjective element, e.g. the intent to compete on the part of the acting person, is deliberately left open.

CSR standards are clearly "acts of competition" if they are brought forward in marketing or are referred to in advertising. The same reasoning applies to CSR standards that are published on a company's website if this website is not for internal use within the company but is made public. The purpose of such a publication is to create a favourable image of the company; consequently it must be regarded as an (indirect) marketing tool, in other words a commercial statement. On the other hand, the production as such is not an act of competition; nor are internal decisions as to the production process or its location.

What other commercial behaviour may meet the requirement "act of competition" will mainly depend on the (constitutional) law of the country where the conflict arises. In the famous *Kasky v. Nike* case (discussed above under Sect. 3.1), the Californian Supreme Court considered Nike's press releases as to production conditions in Mexico as "commercial speech", subjected to Californian unfair competition law. The German Supreme Court, for instance, held that even the putting a product on the market may be considered as an act of competition.²⁹

It should, however, be clearly stated that the qualification of a commercial practice as an "act of unfair competition" does by no means indicate that this practice is also "unfair". An "act of competition" in itself is a neutral term, devoid of any judgment.

4.3 Non-compliance with CSR Standards as a "Misleading Indication"?

Any discussion of the question whether non-compliance with CSR can be considered as being unfair, in other words, contrary to "honest practices", has to begin with Article 10^{bis}(3) PC, which indicates *three specific acts of competition* that in

²⁶ See the LIDL case, discussed supra under Sect. 3.2.

²⁷ H. Köhler (2014), Mitteilungen über Corporate Social Responsibility – eine geschäftliche Handlung?, in R. Hilty & F. Henning-Bodewig (Eds.), Corporate Social Responsibility: Verbindliche Standards des Wettbewerbsrechts?, pp. 161–169.

²⁸ German Federal Supreme Court (BGH), GRUR 1991, 119 – Branchenverzeichnis.

²⁹ German Federal Supreme Court (BGH), 09.05.1980 - I ZR 76/78, GRUR 1980, 858. Asbest Importe; German Supreme Court (BGH), GRUR 1991, 119 - Branchenverzeichnis.

particular have to be considered illegal: creating a risk of confusion, discrediting a competitor, and making false indications about one's own product.

With CSR, the third example (*misleading practices*) may be of importance. This is all the more so because a detailed prohibition of deceptive commercial practices can be found in all 174 countries of the Union, whether via an express statutory prohibition or by the common-law tort of passing off. Consequently, the law where the conflict arises will in general provide for a legal basis similar to that of Article $10^{\rm bis}$ (3) PC.

If a producer falsely claims in commercial statements, in particular advertising material, to respect its own CSR standards—or to respect "official" CSR, certain codes of conduct etc.—this will probably be regarded as a "deceptive indication or allegation" under the national law of most countries. Consequently, it will also be an issue under Article 10^{bis} (3) PC. An example is the *LIDL* case, discussed above. Here, a complaint was brought on the basis of the German Act Against Unfair Competition because LIDL explicitly (and falsely) claimed in advertising material that the advertised products were produced abroad in accordance with certain labour standards. Such an explicit reference to a code of conduct etc. is also regulated under the European Directive 2005/29/EC on Unfair Commercial Practices.

A certain problem arises if there is no explicit statement in advertising but the product is produced contrary to the company's CSR standards, which have been made public on the website or a similar forum. It is sometimes argued that such a practice is not only a "commercial practice" and consequently also an "act of competition" (see above Sect. 4.2) but also a specific assertion as to the company's actual compliance with its own CSR standards.³⁰ According to most national regulations prohibiting deceptive commercial practices, and consequently also to Article 10^{bis} PC, the legal assessment would depend on whether a reasonably informed and attentive average consumer of the target group would take these commitments seriously (not as a mere "puffing"), and would come to the conclusion that the company actually respects its own commitment claims. As a general rule, it can only be stated that the claims deduced from CSR must be rather specific in order to create a sufficiently concrete impression in the eye of the public. "Vague" impressions of fairness will hardly fulfil this requirement. In particular the sole fact of putting a product on the market—even if one considers this as an "act of competition"—cannot be interpreted as an "assertion" that the products were produced under fair working conditions.

³⁰ T. Cottier & G. Wermelinger (2014), Implementing and Enforcing Corporate Social Responsibility: The Potential of Unfair Competition Rules in International Law, in R. Hilty & F. Henning-Bodewig (Eds.), Corporate Social Responsibility: Verbindliche Standards des Wettbewerbs?, pp. 81–97; A. von Walter (2014), CSR und das Irreführungsverbot nach den §§ 5, 5a UWG, in R. Hilty & F. Henning-Bodewig (Eds.), Corporate Social Responsibility. Verbindliche Standards des Wettbewerbsrechts?, pp. 187–197.

4.4 Direct Application of the General Clause ("Honest Practices")?

If the prohibition of *misleading* assertions does not apply because there is no concrete, specific perception of "fairness", the commercial behaviour in question can nevertheless be against "honest practices". The types of conduct listed in para. 3 is clearly a non-exhaustive list of examples ("in particular"). All acts of competition that do not qualify as conduct in the sense of para. 3 can consequently constitute unfair competition under the "fall-back position" of Article 10^{bis}(2). As discussed above, the issue at hand must, however, involve at least indirectly the interests of competitors. "Isolated" information duties solely based on the consumer's possible interest to know about the ethical production of products are not encompassed by Article 10^{bis} PC.

Article 10^{bis}(2) PC requires the act of competition to be "contrary to honest practices in industrial and commercial matters".³¹ This is sometimes criticised as being too imprecise for practical application. Without doubt, difficulties can arise insofar as there are no clear-cut standards that are universally accepted for all cases of market behaviour. And even though many countries have established specific legislation in the field of unfair competition and have introduced the term "honest trade practices" into their laws (or similar terms like "good faith" or "good marketing"), the interpretation is influenced by the general legal, sociological, cultural and economic background of the country.

On the other hand, Article 10^{bis} PC itself gives some guidance on what has to be considered as "dishonest" or "unfair" by

- expressly indicating three examples of commercial conduct in para. 3 that "in particular" are considered unfair. Consequently, any commercial conduct, in order to be prohibited directly under the general clause, has to be equally serious and harmful to the interests of competitors.
- taking the *commercial practices*, e.g. what is actually (and frequently) done in the trader's field of activity, as the starting point.
- limiting the corrective element—honesty ("honnête")—to commercial matters, so that general ethical requirements, especially moral issues, are of no relevance.

In addition, there are *other possibilities* to fill the term "honest trade practices" with life. For instance, in the field of advertising and marketing, many countries look at the guidelines of the International Chamber of Commerce (ICC) when it comes to determining the notion of "fairness". A similar starting point could be

³¹ For an in-depth study of this issue cf. F. Henning-Bodewig (2013), International Protection Against Unfair Competition, in F. Henning-Bodewig (Ed.), International Handbook on Unfair Competition, pp. 22–24. As to the protection of trade secrets under the Paris Convention see G. Surblytė (2015), Enhancing TRIPS: Trade Secrets and Reverse Engineering, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 725 (this volume).

"official" *CSR*, e.g. standards originating from UNESCO, UN, OECD and other internationally respected organisations (discussed above under Sect. 2.1). National law can provide for a guideline, too: In France, for instance, a proposition of law would demand French companies to establish a due dilligence plan in order to ensure the respect of human rights etc by their sub-contractors and suppliers abroad.³² But even "private" CSR established by several companies of a certain branch of a commercial activity may influence the actual practice and what is regarded as honest behaviour.

All these factors, including CSR standards, influence the notion of "honest trade practices". Consequently non-compliance with one's own CSR standards will not automatically be against "honest practices". As a fall back position, the general clause of Article 10^{bis}(2) PC will apply only in *very specific incidences*. Application would require that the CSR standards in question are respected by the enterprises of the respective branch—which in multi-state practices would have to be determined not only according to the situation in one country but also according to the view of other countries of the Union (see above Sect. 4.1). To my knowledge, no decisions by authorities or courts under national, regional or international law have affirmed this, and the matter is highly disputed in legal writing.³³

To sum up, simple non-compliance with CSR established by international organisations or non-compliance with an *internal* corporate strategy to voluntarily respect certain standards of business ethics will hardly ever lead to a violation of Article 10^{bis} PC. It is different if there are additional commercial *statements* as to actual compliance with one's own CSR or references to guidelines originating from organisations like the OECD, UN, etc. If these *statements* are false or deceptive they may be prohibited as a "misleading allegation" (see above Sect. 4.3).

³² Proposition de loi rélative au devoir de vigilance des sociétés mères et des entreprises donneuses d'ordre, No 376 Sénat 2014–2015, enregistré le 31 mars 2015. Pursuant to this proposition of law, French companies with more than 5 million employees would have to establish a plan "de vigilance" to indicate the measures taken in order to prevent violations of human rights, damages to the health or environment resulting from the activities of the company or those enterprises it controls or with which it has commercial relations. A Décret by the Conseil d'Etat would lay down the precise aspects of the "plan de vigilance" and its application in practice. As to similar developments in the national corporate law of some countries cf. fn. 43.

³³ For differing views see e.g. A. Ohly & D. Liebermann (2014), Corporate Social Responsibility: Unmittelbare Beurteilung auf der Grundlage der lauterkeitsrechtlichen Generalklausel, in: R. Hilty & F. Henning-Bodewig (Eds.), Corporate Social Responsibility: Verbindliche Standards des Wettbewerbsrechts?, pp. 197–216; Ch. Riffel (2016), The Protection Against Unfair Competition in World Trade: Implementations of the TRIPS-Agreement and the Paris Convention for the Promotion of Industrial Property and B. Spiesshofer (2014), Wirtschaft und Menschenrechte – rechtliche Aspekte der Corporate Social Responsibility, NJW 2014, 2473–2479.

5 TRIPS: Indirect Prohibition of "Unfair Competition" via Inclusion of Article 10^{bis} PC?

But is this also true for TRIPS? As mentioned above, CSR or other issues concerning business ethics are neither expressly regulated in TRIPS nor are they referred to as such. In addition, "fairness" of market practices as such is not a subject matter regulated in Parts II, III and IV of TRIPS.

On the other hand, if Article 10^{bis} PC were included in TRIPS, at least certain forms of CSR would be indirectly incorporated in TRIPS as well. Consequently, it must be clarified first of all if Article 10^{bis} PC is of relevance to TRIPS at all.³⁴

5.1 Express Reference to Article 10^{bis} PC in TRIPS

Pursuant to Articles 22 and 39 TRIPS, member states are required to protect *geographical* indications of origin against misleading designations, or generally against anything that "constitutes an act of unfair competition within the meaning of Article 10^{bis} of the Paris Convention". They are equally obliged to protect *trade or business secrets* against disclosure if this would be unfair competition in the sense of Article 10^{bis} PC. ³⁵ In these two specific incidences TRIPS *directly* refers to Article 10^{bis} PC.

5.2 "Paris-Plus" Approach of TRIPS and Article 10bis PC

Apart from this, TRIPS itself does not contain an *explicit* provision corresponding to Article 10^{bis} PC. Consequently, a general obligation to combat unfair competition would only be possible via the *general reference* to the Paris Convention in Article 2 TRIPS.

Pursuant to Article 2(2) TRIPS, all members of TRIPS that are also signatory members of the Paris Convention must comply with the latter's principles and minimum standard of protection. This also encompasses compliance with Article

³⁴ T. Cottier & G. Wermelinger (2014), Implementing and Enforcing Corporate Social Responsibility: The Potential of Unfair Competition Rules in International Law, in R. Hilty & F. Henning-Bodewig (Eds.), Corporate Social Responsibility: Verbindliche Standards des Wettbewerbs?, pp. 91–96; Ch. Wadlow (2011), The Law of Passing-Off: Unfair Competition by Misrepresentation, paras. 2-009 et seq.; T. Cottier & A. Jevtic (2009), The Protection against Unfair Competition in WTO Law: Status, Potential and Prospects, in J. Drexl et al. (Eds.), Technology and Competition — Technologie et Concurrence: Contributions in Honour of Hanns Ullrich, pp. 669–695.

³⁵ G. Surblytė (2015), Enhancing TRIPS: Trade Secrets and Reverse Engineering, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 725 (this volume).

 10^{bis} PC, but only according to the (restricted) principles of the Paris Convention. It would not endow Article 10^{bis} PC with the effective enforcement provided by TRIPS.

The only way to do so would be via *Article 2(1)* TRIPS.³⁶ This rather sweeping obligation states "In respect of Parts II, III and IV of this Agreement, Members shall comply with Articles 1 through 12, and Article 19, of the Paris Convention (1967)". This paragraph is, however, somewhat ambiguous:

If an unlimited compliance with Articles 1–12 and 19 PC were required, all WTO members would have to give effect to Article 10^{bis} PC in their national laws. Article 2(1) TRIPS, however, adds the words "in respect of Parts II, III, and IV of this Agreement". Does this entail a restriction of the reference to the Paris Convention to the subject matters expressly named in Parts II, III and IV, namely the protection of trade secrets and indications of origin?

WIPO, for instance, regards Article 10^{bis} PC as fully referred to by Article 2(2) TRIPS.³⁷ As a consequence, there would be an obligation to transpose the standard of Article 10^{bis} PC into national law while under the Paris Convention only members of other states can demand protection on the basis of Article 10^{bis} PC (and even this is disputed in the US and UK, which do not recognize Article 10^{bis} PC as "self-executing"). Insufficient compliance with the minimum standard of the Paris Convention could entail the stricter enforcement mechanism of TRIPS. Other scholars³⁸ prefer, however, a much narrower interpretation and assume that compliance with Article 10^{bis} PC is restricted to the protection of trade secrets and indications of origin, so that any other unfair act of competition would not fall under the TRIPS Agreement.

5.3 Consequences of the "Havana Club" Decision

The "Havana Club" decision³⁹ did not directly involve unfair competition but dealt with trademarks and trade names of enterprises expropriated in Cuba, which were

³⁶ Article 2(1) TRIPS is discussed by A. Wiebe (2013), in J. Busche, A. P. T. Stoll & A. Wiebe (Eds.), TRIPS; F. Henning-Bodewig (2013), International Protection Against Unfair Competition, in F. Henning-Bodewig (Ed.), International Handbook on Unfair Competition, pp. 33–36; D. Gervais (2003), The TRIPS Agreement: Drafting History and Analysis.

³⁷ M. Höpperger & M. Senftleben (2007), Protection Against Unfair Competition at the International Level: The Paris Convention, the 1996 Model Provisions and the Current Work of WIPO, in R.M. Hilty, & F. Henning-Bodewig (Eds.), Law Against Unfair Competition: Towards a New Paradigm in Europe?, pp. 61–77.

³⁸ As to the different opinions in this matter F. Henning-Bodewig (2013), International Protection Against Unfair Protection, in F. Henning-Bodewig (Ed.), International Handbook on Unfair Competition, pp. 33–36.

³⁹ WTP Appellate Body in AB-2001-7 United States – Section 211 Omnibus Apparitions Act of 1998 – Hayana Club.

denied protection under US law. However, a parallel to Article 10^{bis} PC exists insofar as trade names, too, are not mentioned in TRIPS (but are protected under Article 8 of the PC).

The First Instance Panel interpreted the term "intellectual property" in Article 1 (2) as a reference to the categories set forth in Part II of TRIPS. Since trade names are not mentioned in Part II, they were consequently not seen as included in the TRIPS Agreement by virtue of this reference. This was, however, reversed by the Appellate Body, which came to the conclusion that "WTO Members have an obligation under the TRIPs Agreement to provide protection to trade names".

Because of the obvious differences between trade names and the repression of unfair competition in TRIPS, leading scholars like Wadlow⁴⁰ do not regard "Havana" as a decision which acknowledges full inclusion of Article 10^{bis} PC in TRIPS. They argue that while trade names are not mentioned at all in TRIPS, Article 10^{bis} PC is at least referred to in the context of the protection of trade secrets and geographical indications. The reference to unfair competition in Article 2(1) TRIPS would consequently not be totally devoid of any meaning (as would be the reference to Article 8 PC).

The question whether Article 10^{bis} PC is fully included in TRIPS via the general reference to the PC in Article 2(2) TRIPS thus remains a disputed one. It depends on how one sees the relationship of intellectual property to unfair competition law. ⁴¹ If one regards both as not only intertwined but intellectual property protection as being based on the principle of fair competition and good faith, a full inclusion of Article 10^{bis} PC appears to be the logical consequence. According to *Cottier & Wermelinger* this was regarded as self-evident at the TRIPS negotiations ("should negotiating parties have wished to exclude recourse to Article 10^{bis} Paris Convention they would have said so ..."). ⁴²

6 Conclusions

6.1 Situation de lege lata

 The term Corporate Social Responsibility (CSR) encompasses quite broadly all standards of ethical commercial behaviour promoted by international or regional organisations (most famously, ILO). It also refers to standards of voluntary (not

⁴⁰Ch. Wadlow (2011), The Law of Passing-Off: Unfair Competition by Misrepresentation, paras. 2-072 et seq.

⁴¹Compare, for instance, N. Lee et al. (2014), Intellectual Property, Unfair Competition and Publicity, Convergence and Development.

⁴² T. Cottier & G. Wermelinger (2014), Implementing and Enforcing Corporate Social Responsibility: The Potential of Unfair Competition Rules in International Law, in R. Hilty & F. Henning-Bodewig (Eds.), Corporate Social Responsibility: Verbindliche Standards des Wettbewerbs?, p. 93.

- legally required) ethical business behaviour established by individual enterprises themselves. There seems to be agreement insofar that both forms of CSR standards are not legally binding *per se* but only if national, regional or international law expressly provides for such a binding character.
- Under national law, certain aspects of CSR standards will be explicitly regulated by law, e.g. under labour or corporate law, environmental protection laws etc.
 These regulations are typically restricted to the production on the national territorium and insofar there seems to be only hesitant attempts to regulate certain CSR standards in the production process abroad (see under Sect. 4.4).
- Specific CSR-standards laid down in statutory law, established by international organisations or by enterprises themselves can, however, *indirectly influence* the interpretation of other laws, in particular statutory regulations in the field of unfair competition, unfair trade practices, etc. Most *national laws* contain a prohibition of *misleading* practices and quite often also a general clause prohibiting unfair commercial practices. As examples from the US and Germany show, the establishing of CSR standards may be a voluntary choice of business, but the disregard of the pledged commitment, if *brought forward on the company's website or in marketing and advertising*, can in certain circumstances entail legal consequences. This is in particular true if the public is deceived as to the actual commercial behaviour of an enterprise.
- Whether CSR standards play a comparable role for the TRIPS Agreement is difficult to say. CSR is neither expressly regulated or referred to in TRIPS nor is there any general prohibition of "unfair competition" or "deceptive practices".
- On the other hand, such a general prohibition of "unfair competition" can be found in Article 10^{bis} of the Paris Convention (PC) and TRIPS is in many respects built on the Paris Convention.
- The problem is that TRIPS does not clearly indicate its position on the repression of unfair competition. The crucial question remains whether the general reference in Article 2(1) of TRIPS to the Paris Convention (also) extends to Article 10^{bis} PC, or whether the reference in TRIPS to unfair competition is restricted to cases involving indications of origin and undisclosed information. This is disputed. It can only be stated that the so-called *Havana Club* decision of the Appellate Body has strengthened the arguments for a full inclusion of Article 10^{bis} PC, although this case concerned trade names, not unfair competition.
- Even if one assumes that Article 10^{bis} PC is fully (though indirectly) incorporated into TRIPS, this does not mean that non-compliance with CSR standards is automatically regarded as "unfair competition". This would only be true if the specific requirements of Article 10^{bis} PC are fulfilled.
- Without doubt, false statements referring to CSR standards in advertising or marketing can be regarded as a "deceptive indication", prohibited in Article 10^{bis}(3) PC. Since deceptive marketing practices belong to the hard core of prohibited commercial behaviour in all countries, false or deceptive claims as to CSR are at least in principle forbidden. The determination of additional requirements and the role of "commercial speech", the question of which claims are specific enough and are taken seriously, their relevance to consumers etc. is

- mainly left to the courts or authorities of the country where this question has to be decided.
- If there is an "act of competition" but no explicit statement as to the actual compliance with certain standards of business ethics, CSR standards may be of relevance to Article 10^{bis} PC insofar as they may influence the interpretation of the term "honest practices" in Article 10^{bis}(2) PC, the fall-back clause for those practices that are not specifically prohibited. Since the PC has to be interpretated autonomously (as discussed under Sect. 4.1) this would, however, require certain CSR standards (most likely standards like ILO) to be generally practiced and respected in a given branch of commercial activity.
- If production is simply outsourced to countries with lower legal standards of human rights, labour conditions, etc., this is considered to be outside of the scope of application of Article 10^{bis} PC which does not regulate production as such or internal business matters.

6.2 Suggestions de lege ferenda

- First of all, an *unambiguous*, full inclusion of Article 10^{bis} PC and its prohibition of unfair competition in TRIPS should be aimed at. A situation where important issues like fairness of commercial practices are not clearly incorporated should at least be reconsidered. This all the more so, as the repression of unfair competition is even more in line with TRIPS than with the Paris Convention. TRIPS (through the link to GATT and the WTO) aims much more directly at the promotion of trade than the Paris Convention. Consequently, the "Paris-plus" approach of TRIPS hardly makes sense if the only provision in the Paris Convention that directly addresses competition was left aside.
- Part of the problem lies in the notion "intellectual property", which is not clearly defined in TRIPS. As the inclusion of unfair competition in the notion of "industrial property" in the Paris Convention shows, IP rights and unfair competition law principles overlap. Consequently, the concept of "intellectual property" should be clearly construed in a way to include at least the possibility of actions under the aspect of unfair competition.
- In principle Article 10^{bis} PC—an "unfair competition law in a nutshell" which has influenced the laws of many countries—is an excellent tool to promote business ethics and to mitigate some of the harshness that globalisation may bring to small and medium business, the consumers and the public at large. Since Article 10^{bis} PC has not been modernised since 1958, it has, of course, to be further developed, even "informally". The intense discussion of the merits of Article 10^{bis} PC in recent years clearly demonstrates the need for such a mitigating legal instrument on the international level.
- CSR standards typically lay down principles regarding "fair" market behaviour and at least *certain forms* of non-compliance with one's own pledges of commitment can and should be judged on the grounds of Article 10^{bis} PC. If CSR standards are not restricted to internal use within the business organization but

are *made public* on the company's website or used in advertising or marketing, they aim at creating a *favourable image* of the company. It seems hypocritical to draw on their value as a marketing instrument but to pretend that they are "solely voluntary" when it comes to the question of being held responsible for one's own public denouncements.

- On the other hand, to overcome the negatives effects of the outsourcing of production to countries with lower legal standards in the field of labour law, environmental protection or human rights is hardly possible with the help of unfair competition law. Production as such, a company's decision as to the location of production, its commercial relations with suppliers and sub-contractors are internal business matters. It would go beyond the concept of Article 10^{bis} PC to control them through unfair competition law. Article 10^{bis} PC regulates not corporate strategies but the fairness of *individual market practices* directed to consumers or competitors. In addition, issues like human rights, etc. are so multi-facetted and involve so many conflicting aspects and considerations that they cannot be dealt with on the basis of a general clause like Article 10^{bis}(2) PC which necessarily operates with rather open terms and concepts. These are issues that should be expressly regulated by WTO and the agreements based on WTO. The attempts to introduce them at least into national (corporate) law (discussed under Sect. 4.1) are a promising step in this direction.
- It should, however, once more be repeated that the moment an enterprise actively brings forward a false claim of "fairness" (on its website, in advertising, in public statements) this can and should entail legal consequences under unfair competition law aspects.

References

Arnold, R. (2013), English Unfair Competition Law, IIC 2013, 63–64, Munich/Berlin: C.H. Beck/Springer

Besmer, V. (2000), The Legal Character of Private Codes of Conduct: More Than Just a Pseudo-Formal Gloss on Corporate Social Responsibility, 2 Hastings Bus. L.J. 2000, 279–306, San Francisco: UC Hastings College of the Law

Bodenhausen, G. (1968), Guide to the Application of the Paris Convention for the Protection of Industrial Property, Geneva: WIPO Publications

Böttcher, A. & Henning-Bodewig, F. (2013), Germany, in F. Henning-Bodewig (Ed.), International Handbook on Unfair Competition, pp. 231–261, Munich/Oxford/Baden-Baden: Beck/Hart/Nomos

⁴³ As to "due dilligence" obligations in national corporate law see the comparative study of the Swiss Institute of Comparative Law (2013), Avis 12-227 of September 6, 2013 and the French proposition of law discussed in Sect. 4.1. The Directive 2014/95/EU (Official Journal of the European Union, L 330/1 of 15.11.2014) requires large companies to disclose in their management reports risks and outcomes as regards environmental matters, respect of human rights, anticorruption issues, etc.

- Bu, Y. & Roth, B. (2014), Corporate Social Responsibility und Lauterkeitsrecht aus asiatischer Sicht, in R. Hilty & F. Henning-Bodewig (Eds.), Corporate Social Responsibility: Verbindliche Standards des Wettbewerbsrecht?, pp. 213–225, Berlin: Springer
- Busche, J., Stoll, P.-T. & Wiebe, A. (2013), TRIPS, 2nd ed., Köln: Heymanns
- Cherry, M. & Sneirson, J. (2011), Beyond Profit: Rethinking Corporate Social Responsibility and Greenwashing after the BP Oil Disaster, 85 Tul. L. Rev. 2011, 1028–1030, New Orleans: Tulane University Law School
- Cottier, T. & Jevtic, A. (2009), The Protection against Unfair Competition in WTO Law: Status, Potential and Prospects, in J. Drexl et al. (Eds.), Technology and Competition Technologie et Concurrence: Contributions in Honour of Hanns Ullrich, pp. 669–695, Brussels: Larcier
- Cottier, T. & Wermelinger, G. (2014), Implementing and Enforcing Corporate Social Responsibility: The Potential of Unfair Competition Rules in International Law, in R. Hilty & F. Henning-Bodewig (Eds.), Corporate Social Responsibility: Verbindliche Standards des Wettbewerbsrechts?, pp. 81–99, Berlin: Springer
- Henning-Bodewig, F. (Ed.) (2013), International Handbook on Unfair Competition, Munich/Oxford/Baden-Baden: Beck//Hart/Nomos
- Henning-Bodewig, F. (2009), International Unfair Competition Law, in R. Hilty & F. Henning-Bodewig (Eds.), Law Against Unfair Competition: Towards a New Paradigm in Europe?, pp. 53–61, Berlin: Springer
- Höpperger, M. & Senftleben, M. (2007), Protection Against Unfair Competition at the International Level: The Paris Convention, the 1996 Model Provisions and the Current Work of WIPO, in R. Hilty, & F. Henning-Bodewig (Eds.), Law Against Unfair Competition: Towards a New Paradigm in Europe?, pp. 61–77, Berlin: Springer
- Gervais, D. (2012), The TRIPS Agreement: Drafting History and Analysis, 4th ed., London: Secret & Maxwell
- Jackson, G. (2014), Socio-Political Perspective on CSR, in R. Hilty &F. Henning-Bodewig (Eds.), Corporate Social Responsibility: Verbindliche Standards des Wettbewerbsrechts?, pp. 19–23, Berlin Springer
- Kerr, M., Janda, R. & Pitts, Ch. (2009), Corporate Social Responsibility, Markham: LexisNexis
 Köhler, H. (2014), Mitteilungen über Corporate Social Responsibility eine geschäftliche
 Handlung?, in: R. Hilty & F. Henning-Bodewig (Eds.), Corporate Social Responsibility –
 Verbindliche Standards des Wettbewerbsrechts?, pp. 161–169, Berlin: Springer
- Ladas, S. (1930), The International Protection of Industrial Property, Cambridge: Harvard University Press
- Lee, N. et al. (2014), Intellectual Property, Unfair Competition and Publicity, Convergence and Development, Cheltenham: Edward Elgar
- Malbon, J., Lawson, Ch. & Davison, M. (2014), The WTO Agreement on Trade Related Aspects of Intellectual Property Rights, Cheltenham: Edward Elgar
- Mares, R. (2008), The Dynamics of Corporate Social Responsibilities, Leiden/Boston: Martinus Nijhoff Publishers
- Mullerat, G. (2005), Corporate Social Responsibility: The Corporate Governance of the 21st Century, Den Haag: Wolters Kluwer
- Ohly, A. & Liebermann, D. (2014), Corporate Social Responsibility: Unmittelbare Beurteilung auf der Grundlage der lauterkeitsrechtlichen Generalklausel?, in: R. Hilty & F. Henning-Bodewig (Eds.), Corporate Social Responsibility, Verbindliche Standards des Wettbewerbsrechts?, pp. 197–216, Berlin: Springer
- Peukert, A. (2014), Die Rechtsrelevanz der Sittlichkeit der Wirtschaft am Beispiel der Corporate Social Responsibility im US-Recht, in R. Hilty, R. & F. Henning-Bodewig (Eds.), Corporate Social Responsibility: Verbindliche Standards des Wettbewerbsrechts?, pp. 233–261, Berlin: Springer
- Pflüger, M. (2011), in T. Cottier & P. Véron (Eds.), Concise International and European Law, 2nd ed., Alphen aan den Rijn: Wolters Kluwer Law & Business

- Pflüger, M. (2010), Der internationale Schutz gegen unlauteren Wettbewerb, Köln: Carl Heymanns
- Podszun, R. (2014), Corporate Social Responsibility-Standards, in R. Hilty & F. Henning-Bodewig (Eds.), Corporate Social Responsibility: Verbindliche Standards des Wettbewerbsrechts?, pp. 51–81, Berlin: Springer
- Riffel, Ch. (2016), The Protection Against Unfair Competition in World Trade: Implications of the TRIPS-Agreement and Paris Convention for the Protection of Industrial Property, Cambridge: Cambridge University Press
- Spiesshofer, B. (2014), Wirtschaft und Menschenrechte rechtliche Aspekte der Corporate Social Responsibility, NJW 2014, 2473–2479, Munich: C.H. Beck
- Stuyck, J. (2014), Corporate Social Responsibility Standards and the Belgian and French Perspective, in R. Hilty & F. Henning-Bodewig (Eds.), Corporate Social Responsibility: Verbindliche Standards des Wettbewerbsrechts?, pp. 225–233, Berlin: Springer
- Surblytė, G. (2015), Enhancing TRIPS: Trade Secrets and Reverse Engineering, in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 725, Heidelberg: Springer (this volume)
- Wadlow, Ch. (2011), The Law of Passing-Off: Unfair Competition by Misrepresentation, 4th ed., London: Sweet & Maxwell
- von Walter, A. (2014), CSR und das Irreführungsverbot nach den §§ 5, 5a UWG, in R. Hilty & F. Henning-Bodewig (Eds.), Corporate Social Responsibility: Verbindliche Standards des Wettbewerbsrechts?, pp. 187–197, Berlin: Springer

Enhancing TRIPS: Trade Secrets and Reverse Engineering

Gintarė Surblytė

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Abstract Twenty years after TRIPS, the European Commission has raised an initiative to harmonize trade secret protection throughout the EU. Due to having set minimum requirements, TRIPS has not achieved uniform trade secret protection. Importantly, it remained silent in Article 39 TRIPS on such concepts as reverse engineering. As a result, national laws and/or case-law on this issue diverge not only on both sides of the Atlantic, but also within the EU. Yet, drawing the limits of trade secret protection and the boundaries of reverse engineering is of highest importance for innovation. The Proposal for the Directive which aims at harmonizing trade secret protection in the EU explicitly addresses reverse engineering as a legitimate means to discover information. However, it simultaneously provides for a possibility to restrict it on the basis of a contract. The question thereby arises of the legitimacy of such contractual restrictions and possibly of the limits of a freedom of contract. A further issue to be discussed is whether the Proposal for the Trade Secrets Directive goes beyond TRIPS in a way that it could

Dr. Gintarė Surblytė, LL.M. (München) is Senior Research Fellow at the Max Planck Institute for Innovation and Competition, Munich.

G. Surblytė (⊠)

be considered as an enhanced, "TRIPS-plus" model to be followed not only within the EU, but also outside its borders.

1 Introduction

Although trade secrets have often been called a "stepchild" or "the Cinderella" of IP, in reality they are rather a Grey Cardinal in the IP realm—standing pretty much in the back row, yet very often being of crucial importance. In fact, the role of trade secrets has been growing, since companies do not only rely on trade secrets, but very often they prefer them to patents.³

The Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS)⁴ was the first multilateral instrument which introduced a specific international provision on the protection of undisclosed information (Article 39).⁵ Now, almost 20 years after TRIPS, the European Commission has identified the need to harmonize trade secret protection throughout the European Union (the EU).⁶ In the words of the Commission: "Notwithstanding the TRIPS Agreement, there are important differences in the Member States legislation as regards the protection of trade secrets against their unlawful acquisition, use or disclosure by other persons".⁷

Although primarily important for enforcement, 8 the harmonization of trade secret protection is complex, since trade secrets are often a subject of contracts. A big proportion of cases which arise in this field concerns employment

¹C. Ann (2007), Know-How – Stiefkind des Geistigen Eigentums?, GRUR 2007, 39.

² S.K. Sandeen (2007), The Cinderella of Intellectual Property Law: Trade Secrets, in P.K. Yu (Ed.), Intellectual Property and Information Wealth: Issues and Practices in the Digital Age, pp. 399-420

³ M.F. Schultz & D.C. Lippoldt (2014), Approaches to Protection of Undisclosed Information (Trade Secrets) – Background Paper, TAD/TC/WP(2013)21/FINAL, OECD Trade Policy Paper No. 162 of 22 January 2014 (hereinafter: OECD Trade Policy Paper No. 162), p. 13.

⁴ Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) of 15 April 1994 (Annex to the Agreement Establishing the World Trade Organization (WTO)).

⁵ J. Brammsen (2014), in P.W. Heermann & J. Schlingloff (Eds.), Münchener Kommentar zum Lauterkeitsrecht, Vor § 17, para. 10; D. Gervais (2012), The TRIPS Agreement: Drafting History and Analysis, p. 541. This was considered to be "one of the most significant innovations brought about by the TRIPS Agreement" (C.M. Correa (2007), Trade Related Aspects of Intellectual Property Rights, p. 366).

⁶ European Commission, Proposal for a Directive of the European Parliament and of the Council on the protection of undisclosed know-how and business information (trade secrets) against their unlawful acquisition, use and disclosure, 28 November 2013 (COM(2013) 813 final) (hereinafter: Proposal for the Trade Secrets Directive).

⁷ Proposal for the Trade Secrets Directive, supra fn. 6, recital 5.

⁸ OECD Trade Policy Paper No. 162, supra fn. 3, pp. 5, 17-20, 24.

relationships. For example, one of the earliest cases on trade secrets in the U.S. was triggered by a departing employee. Although the Proposal for the Directive does not cover such areas as non-disclosure obligations imposed on former employees, this may be explained by the complexity of these issues and their regulation by national labor and contract laws. The benefits of harmonization may yet also lie in clarifying the concepts which have up to now been left open by the regulatory legal framework—for example, reverse engineering, which was not explicitly addressed by TRIPS in the provision on undisclosed information.

Defined by the U.S. Supreme Court in *Kewanee Oil* as "starting with the known product and working backward to divine the process which aided in its development or manufacture", ¹² reverse engineering is a form of discovery of information. By setting boundaries to trade secret protection, reverse engineering not only balances trade secret law with the whole system of IP. It is also crucial for keeping the gates to innovation open.

Compared to the areas of IP law, such as copyright and patent law, reverse engineering is mostly important for trade secret law. In the case of patents, the disclosure of the invention in the patent application basically renders reverse engineering unnecessary, ¹³ although it remains possible ¹⁴ (not least for experimental use). ¹⁵ For copyright, which protects forms of expression, but not ideas themselves, reverse engineering did not play much of a role until copyright protection was extended to computer programs. ¹⁶

It is in particular in software where contractual restrictions on reverse engineering come into play. No clear-cut answer is given on the legitimacy of such contractual restrictions on either side of the Atlantic. However, as pointed out by *Ohly*, "... if there are sound policy reasons for allowing reverse engineering,

⁹ R.P. Merges, S.P. Menell & M.A. Lemley (2012), Intellectual Property in the New Technological Age, p. 84.

¹⁰ Peabody v. Norfolk, 98 Mass. 452 (1868).

¹¹ See R. Knaak, A. Kur & R.M. Hilty (2014), Comments of the Max Planck Institute for Innovation and Competition of 3 June 2014 on the Proposal of the European Commission for a Directive on the Protection of Undisclosed Know-How and Business Information (Trade Secrets) Against Their Unlawful Acquisition, Use and Disclosure of 28 November 2013, COM(2013) 813 Final, 45 IIC 2014, 953, 955, point 8. See also OECD Trade Policy Paper No. 162, supra fn. 3, p. 20.

¹² Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470, 476 (1974).

¹³ P. Samuelson & S. Scotchmer (2001-2002), The Law and Economics of Reverse Engineering, 111 Yale L.J. 2001–2002, 1575, 1584.

¹⁴ "While the reconstruction of a patented product may infringe the patent, the reverse analysis as such does not" (A. Ohly (2009), Reverse Engineering: Unfair Competition or Catalyst for Innovation?, in W. Prinz zu Waldeck und Pyrmont et al. (Eds.), Patents and Technological Progress in a Globalized World, pp. 543-544).

¹⁵ See K.J. Strandburg (2004), What Does the Public Get? Experimental Use and the Patent Bargain, Wis. L. Rev. 2004, 81.

¹⁶ P. Samuelson & S. Scotchmer (2001-2002), The Law and Economics of Reverse Engineering, 111 Yale L.J. 2001–2002, 1575, 1650.

there will also be a need for careful scrutiny of anti-reverse engineering clauses in mass-market contracts . . .". ¹⁷ Since contractual restrictions on reverse engineering are now explicitly addressed in the Proposal for the Trade Secrets Directive, it is important not only to analyse a *status quo* of regulatory provisions and case-law on this issue. It is also crucial to assess the potential impact of such restrictions on competition and innovation.

2 Protection of Trade Secrets After TRIPS: Need for Harmonization?

By setting an international benchmark for trade secret protection, TRIPS was not entering a *terra incognita* of the national trade secret law provisions in many countries. Quite the contrary: many Member States had statutory provisions and/or case-law on the protection of trade secrets. In fact, the historical roots of this field of law are said to go back as far as the Roman Empire ¹⁸ or even further back in history before Christ. ¹⁹ In Europe, the first legal (criminal) provision on trade secrets was introduced by France in 1810 (Art. 418 Code Pénal). ²⁰ Germany anchored the statutory protection of trade secrets in the Law Against Unfair Competition (UWG), which entered into force on 1 July 1896. ²¹ In common-law jurisdictions, case-law on trade secrets started developing in the nineteenth century. For example, in the U.S. one of the earliest cases dealing with trade secrets dates back to 1837. ²²

Yet, not only have trade secrets been a "stepchild" of IP—they were also a stepchild of TRIPS. As early as in the negotiations of the Agreement, the debate flared up among negotiating countries on whether trade secret protection could be included under the umbrella of TRIPS. Some of them argued that due to a mandate granted to negotiate an agreement on intellectual property rights they lacked a mandate to negotiate on trade secrets.²³ The compromise reached was to include "undisclosed information" in a

¹⁷ A. Ohly (2009), Reverse Engineering: Unfair Competition or Catalyst for Innovation?, in W. Prinz zu Waldeck und Pyrmont et al. (Eds.), Patents and Technological Progress in a Globalized World, p. 546.

¹⁸ R.P. Merges, S.P. Menell & M.A. Lemley (2012), Intellectual Property in the New Technological Age, p. 33.

¹⁹ J. Brammsen (2014), in P.W. Heermann & J. Schlingloff (Eds.), Münchener Kommentar zum Lauterkeitsrecht, Vor § 17, para. 1.

²⁰ Ibid., para. 4.

²¹ Ibid., para. 6.

²² Vickery v. Welch, 36 Mass. 523 (1837).

²³ See, for example, the Communication from India, MTN.GNG/NG11/W/37 of 10 July 1989, p. 18, para. 47: "Since trade secret cannot be regarded as an intellectual property, it is beyond the mandate of the Negotiating Group to consider this matter". See also the Communication from Peru, MTN.GNG/NG11/W/45 of 27 October 1989, p. 5; the Communication from Brazil, MTN. GNG/NG11/W/57 of 11 December 1989, p. 8.

legal framework of protection against unfair competition as provided for in Article 10*bis* of the Paris Convention (Article 39 TRIPS).²⁴

Article 10bis(2) of the Paris Convention stipulates that an act of unfair competition is "any act of competition contrary to honest practices in industrial or commercial matters". Article 10bis(3) does not explicitly mention the protection of trade secrets in the exemplary list of prohibited acts of unfair competition—yet, the provided list is not exhaustive. As explained by Ladas, "Article 10bis is valuable because it contains the broad stipulation that any act of competition 'contrary to honest practices' constitutes an act of unfair competition". 25 By referring in Article 39(1) TRIPS to Article 10bis of the Paris Convention and in Article 2(1) TRIPS to the particular provisions of the Paris Convention (including Article 10bis), as well as by prohibiting, in Article 39(2) TRIPS, the acquisition, disclosure or use of undisclosed information without the consent of a trade secret holder "in a manner contrary to honest commercial practices". TRIPS has specified the acts which may be considered acts of unfair competition, namely: an unlawful acquisition, use or disclosure of a trade secret. 26 Thereby, Article 39 TRIPS has been construed as a special case of protection against unfair competition.²⁷ "A manner contrary to honest commercial practices" is further explained in footnote 10 of Article 39(2) TRIPS, ²⁸ which provides examples ("at least") of which behavior may be considered dishonest. Yet, firstly, the list is non-exhaustive, so the Member States may go beyond it in their national laws. Secondly, footnote 10 does not address the boundaries of the legitimacy and of the scope

²⁴ F. Dessemontet (2008), Protection of Trade Secrets and Confidential Information, in C.M. Correa & A. Yusuf (Eds.), Intellectual Property and International Trade: The TRIPS Agreement, p. 272; M. Peter & A. Wiebe (2013), in J. Busche, P.-T. Stoll & A. Wiebe (Eds.), TRIPs, Artikel 39, paras. 3-6, 9.

²⁵ S.P. Ladas (1975), Patents, Trademarks, and Related Rights, p. 1686.

²⁶ On the discussion on the scope of Article 10*bis* of the Paris Convention and on Article 39 TRIPS see M. Peter & A. Wiebe (2013), in J. Busche, P.-T. Stoll & A. Wiebe (Eds.), TRIPs, Artikel 39, paras. 5, 10. On the "Paris-Plus" approach and on the question of the scope of application of Article 10*bis* in the overall framework of TRIPS see F. Henning-Bodewig (2015), TRIPS and Corporate Social Responsibility: Unethical Equals Unfair Business Practices? in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles, p. 701 (this volume), see also F. Henning-Bodewig (2013), International Protection against Unfair Competition, in F. Henning-Bodewig (Ed.), International Handbook on Unfair Competition, pp. 9–39; C. Wadlow (2011), The Law of Passing-off: Unfair Competition by Misrepresentation, paras. 2-009 et seq., in particular, paras. 2-060 et seq.

²⁷ O. Brand (2013), in J. Busche, P.-T. Stoll & A. Wiebe (Eds.), TRIPs, Artikel 2, para. 111.

²⁸ Footnote 10 of Article 39(2) TRIPS stipulates that "for the purpose of this provision, 'a manner contrary to honest commercial practices' shall mean at least practices such as breach of contract, breach of confidence and inducement to breach, and includes the acquisition of undisclosed information by third parties who knew, or were grossly negligent in failing to know, that such practices were involved in the acquisition".

of secrecy clauses, ²⁹ thereby leaving this delimitation to the national contract and competition laws. ³⁰

An international benchmark set by TRIPS was a minimum standard for protection (Article 1(1) 2nd sentence TRIPS).³¹ Since the addressees of Article 39(1) TRIPS were Member States, instead of individuals, the norm had to be implemented in national laws.³² This, at least in the EU, has resulted in national legal differences³³ ranging from (the lack of) a definition of a trade secret to the boundaries of trade secret protection. Not all the differences can be mentioned here, but a few of them may well illustrate the situation. The terminology regarding trade secrets is not uniform in the EU. The EU Technology Transfer Block Exemption Regulation uses the term "know-how".³⁴ Although the former Technology Transfer BER listed know-how under "intellectual property rights",³⁵ this is not the case in the new TTBER.³⁶ Furthermore, in some countries of the EU, for example, in Germany, the definition of a trade secret goes beyond the definition in Article 39 TRIPS by requiring an intent (*der Geheimhaltungswille*) which is based on a commercial interest (*das Geheimhaltungsinteresse*) of a trade secret holder to keep the

²⁹ H. Ullrich (1995), Technologieschutz nach TRIPS: Prinzipien und Probleme, GRUR Int. 1995, 623, 630 fn. 63.

³⁰ M. Peter & A. Wiebe (2013), in J. Busche, P.-T. Stoll & A. Wiebe (Eds.), TRIPs, Artikel 39, para. 27.

³¹ "Members may, but shall not be obliged to, implement in their law more extensive protection than is required by this Agreement, provided that such protection does not contravene the provisions of this Agreement" (Article 1(1) 2nd sentence TRIPS). *Ullrich* argues that a TRIPS standard set, for instance, for trade secret protection was not a minimum standard, but rather *the* standard for protection (H. Ullrich (1995), Technologieschutz nach TRIPS: Prinzipien und Probleme, GRUR Int. 1995, 623, 630).

³² M. Peter & A. Wiebe (2013), in J. Busche, P.-T. Stoll & A. Wiebe (Eds.), TRIPs, Artikel 39, paras. 11, 13.

³³ For more see the following two studies: Hogan Lovells International LLP (2012), Study on Trade Secrets and Parasitic Copying (Look-alikes), Report on Trade Secrets for the European Commission of 13 January 2012; Baker & McKenzie (2013), Study on Trade Secrets and Confidential Business Information in the Internal Market of April 2013.

³⁴ Commission Regulation (EU) No 316/2014 of 21 March 2014 on the application of Article 101(3) of the Treaty on the Functioning of the European Union to categories of technology transfer agreements, OJ [2014] L 93/17, Article 1(1)(i). See also the Guidelines on the application of Article 101 of the Treaty on the Functioning of the European Union to technology transfer agreements, [2014] OJ C 89/03, para. 45.

³⁵ Article 1(1)(g) of the Commission Regulation (EC) No 772/2004 of 27 April 2004 on the application of Article 81(3) of the Treaty to categories of technology transfer agreements, [2004] OJ L 123/11: "intellectual property rights' includes industrial property rights, know-how, copyright and neighbouring rights".

³⁶ Commission Regulation (EU) No 316/2014 of 21 March 2014 on the application of Article 101(3) of the Treaty on the Functioning of the European Union to categories of technology transfer agreements, OJ [2014] L 93/17, Article 1(1)(h): "'intellectual property rights' includes industrial property rights, in particular patents and trademarks, copyright and neighbouring rights".

information secret.³⁷ In the UK, "confidential information" is rather broad and covers not only commercial or technological information, but also personal confidences.³⁸ In France, the Labor Code (Article L 1227-1) foresees criminal liability of the employees for a disclosure of a particular type of secrets, i.e. *secrets de fabrique* (manufacturing secrets). Regarding the scope of trade secret protection, Italy presents an example of trade secret protection as intellectual property.³⁹ Also, in the UK trade secrets have time and again been treated under the theory of property.⁴⁰ Finally, some of the EU Member States have specific laws on trade secret protection (e.g. Sweden), whereas in other countries (e.g. Malta) merely protection by contract is available.⁴¹ Thus, a mosaic in trade secret law in the EU exists not only in terms of discrepancies in trade secret protection, but also in terms of pieces of legislation in civil, criminal, labor, tort law, law against unfair competition, and in some countries, law on intellectual property.

In light of this—almost 20 years after TRIPS—the European Commission states that "... consistency cannot be achieved by action taken solely on the Member State level: experience in this field shows that even when Member States are coordinated to a certain extent, e.g. by the TRIPS Agreement, a sufficient degree of substantive harmonization of national rules is not achieved. Hence, the necessary scale and effects of the proposed action are at EU level". ⁴²

From a comparative point of view, in the United States, for example, the need for a uniform trade secret protection arose as early as 1939, when the American Law Institute released *The Restatement (First) of Torts*. Later, in 1979, the National Conference of Commissioners on Uniform State Laws drafted the model act—The

³⁷ See, for example, Federal Supreme Court of Germany, 27 April 2006 (Kundendatenprogramm), GRUR 2006, 1044, 1046. Interestingly, *Harte-Bavendamm* notes that part of such intent can be a contractual restriction on reverse engineering (H. Harte-Bavendamm (1990), Wettbewerbsrechtliche Aspekte des Reverse Engineering von Computerprogrammen, GRUR 1990, 657, 662).

³⁸ W. Cornish, D. Llewelyn & T. Aplin (2013), Intellectual Property, p. 320. See also A. Coleman (1992), The Legal Protection of Trade Secrets; R.G. Toulson & C.M. Phipps (2012), Confidentiality.

³⁹ Trade secrets in Italy are protected under the Italian Code on Industrial Property as unregistered industrial property. For a critical view on a broad scope of trade secret protection in Italy see G. Ghidini & V. Falce (2011), Trade Secrets as Intellectual Property Rights: A Disgraceful Upgrading – Notes on an Italian "Reform", in R.C. Dreyfuss & K.J. Strandburg (Eds.), The Law and Theory of Trade Secrecy, pp. 140-151.

⁴⁰ See W. Cornish, D. Llewelyn & T. Aplin (2013), Intellectual Property, p. 351: "Is it then, in any meaningful sense, 'property'? The root difficulty of such a question is the flexibility of the property notion in English law and the many ends to which it is employed."

⁴¹ See Hogan Lovells International LLP (2012), Study on Trade Secrets and Parasitic Copying (Look-alikes), Report on Trade Secrets for the European Commission of 13 January 2012, supra fn. 33, p. 1.

⁴² The Explanatory Memorandum of the Proposal for the Trade Secrets Directive (hereinafter: Explanatory Memorandum), p. 7.

Uniform Trade Secrets Act (UTSA)⁴³—which, as amended in 1985, has by now been followed by almost all the states in the U.S. Trade secret law has continued to be updated; for example, amendments were introduced in 2012 to the Economic Espionage Act,⁴⁴ which is a piece of federal legislation on trade secret protection in the U.S. Furthermore, proposals have been made to provide federal jurisdiction for a private civil action in case of a theft of trade secrets.⁴⁵

The initiative of the European Commission to harmonize trade secret protection in the EU is an acknowledgement of the growing importance of trade secrets. The harmonization of trade secret protection, however, does not exist in a vacuum. It is done for a purpose: to enhance the competitiveness and innovation in the EU. The focus of the Commission is on a fragmented legal framework for trade secret protection which it considers as a potential barrier to cross-border trade and innovation. The latter is particularly important for the "Innovation Union" which the EU has envisaged as part of the Europe 2020 strategy. The latter is particularly important for the "Innovation Union" which the EU has envisaged as part of the Europe 2020 strategy.

2.1 The Scope of Harmonization

Trade secrets seem to be bound to compromises. Once they were put on the table of negotiations for Article 39 TRIPS, whereas now it is the Proposal for the Trade Secrets Directive in the EU. Similar to the minimum requirements set by TRIPS, the Proposal for the Directive does not aim at full harmonization. On the contrary, the Proposal of the Council of the European Union states that "Member States may

⁴³ National Conference of Commissioners on Uniform State Laws, Uniform Trade Secrets Act with 1985 Amendments.

⁴⁴Theft of Trade Secrets Clarification Act of 2012 (Pub. L. 112-236, 28 December 2012), amending Section 1832 of title 18, United States Code; Foreign and Economic Espionage Penalty Enhancement Act of 2012 (Pub. L. 112-269, 14 January 2013), amending Section 1831 of title 18, United States Code.

⁴⁵ S. 2267 – Defend Trade Secrets Act of 2014 and H.R. 5233 - Trade Secrets Protection Act of 2014, amending chapter 90 of title 18, United States Code. See also the "Defend Trade Secrets Act of 2015" (S. 1890, H.R. 3326).

⁴⁶ Explanatory Memorandum, supra fn. 42, pp. 6–7: "Existing national rules thus render cross-border network R&D and innovation less attractive and more difficult". See also the Proposal for the Trade Secrets Directive (supra fn. 6), recital 7.

⁴⁷ Council of the European Union, Proposal for a Directive of the European Parliament and of the Council on the protection of undisclosed know-how and business information (trade secrets) against their unlawful acquisition, use and disclosure, No 9870/14 of 19 May 2014 (hereinafter: Proposal of the Council of the European Union), Introduction, para. 2: "This proposal is within the context of the flagship initiative 'Council of Union', one of the pillars of the 'EU 2020 strategy', under which the Commission undertook to create an innovation-friendly environment". See also the Explanatory Memorandum, supra fn. 42, p. 2.

⁴⁸ See European Commission (2010), Communication from the Commission, Europe 2020: A strategy for smart, sustainable and inclusive growth, 3 March 2010 (COM(2010) 2020 final), p. 13.

provide, in compliance with the provisions of the Treaty, for more far-reaching protection against the unlawful acquisition, use or disclosure of trade secrets than that required in this Directive". ⁴⁹ Hence, just as TRIPS does, the Proposal for the Trade Secrets Directive—by setting merely a minimum framework for harmonization—leaves a margin of discretion to the Member States. However, the Proposal for the Directive—like TRIPS in 1995—is not written on a *tabula rasa*, since all Member States of the EU have national provisions on trade secret protection. Thus, although the Proposal aims at making more uniform the existing provisions on the protection of trade secrets, the benefits of harmonization may arise out of targeting such areas of trade secret law which have until now, at least to some extent, been left unregulated.

Since some deficits of uniform trade secret protection could possibly be overcome by contracts, the question is which areas of trade secret law represent a gap in trade secret regulation in the framework of harmonization. Reverse engineering, in particular its scope and its limits, seems to be one such area. The latter is not only a legitimate way to discover information. It is of highest importance for innovation. Yet, it is exactly this area of trade secret law that was not addressed by TRIPS and thus appears to be not harmonized. It may therefore be argued that besides the debate on whether it is a full or a minimum harmonization which is needed in the EU, a *targeted* harmonization may said to be needed in the first place.

2.2 Trade Secrets and the Objectives of TRIPS

Article 7 TRIPS lists the objectives of the Agreement by stipulating that:

The protection and enforcement of intellectual property rights should contribute to the promotion of technological innovation and to the transfer and dissemination of technology, to the mutual advantage of producers and users of technological knowledge and in a manner conducive to social and economic welfare, and to a balance of rights and obligations.

Since undisclosed information is listed as a category of intellectual property (Article 1(2) TRIPS), these objectives apply also to trade secrets. The objectives are the promotion of innovation and the transfer and dissemination of technology and knowledge.

Regarding the dissemination of knowledge, due to secrecy involved, trade secrets stand in contrast to patents, which disclose the invention in the patent application. This does not mean however that information that is kept secret cannot be disseminated at all. Firstly, no absolute secrecy is required for a trade secret. Rather, it is relative secrecy which constitutes part of the definition of a trade secret. Relative

⁴⁹ Proposal of the Council of the European Union, supra fn. 47, Article 1, second subparagraph. See also ibid., State of Play, point 6.

⁵⁰ M. Peter & A. Wiebe (2013), in J. Busche, P.-T. Stoll & A. Wiebe (Eds.), TRIPs, Artikel 39, para. 19.

secrecy means that information may still be considered secret even if it is known by more persons than just a trade secret holder. Secondly, secret information may be reverse-engineered. Thirdly, the legal protection available on the basis of trade secret law encourages the dissemination of information.⁵¹ Statutory as well as contractual protection enables trade secret sharing.⁵² After all, open secrets⁵³ stand at the center of "open innovation". This may be important for small and medium-sized enterprises⁵⁴ that engage in collaborative activities, in particular those related to research and development (R&D). Co-operation may, on the one hand, increase capacity, reduce costs and facilitate or speed up market entry; yet on the other hand, collaboration requires openness and sharing of such sensitive companies' assets as are trade secrets.

Thus, trade secrets—although they at first sight seem to stand at odds with the dissemination of knowledge—conform to one of the objectives of TRIPS. A trickier question regards innovation. Although the U.S. Supreme Court in the landmark *Kewanee Oil v. Bicron* case stated that "the maintenance of standards of commercial ethics and the encouragement of invention are the broadly stated policies behind trade secret law", 55 the impact of trade secrets on innovation may be positive as well as negative.

2.2.1 Trade Secrets and Innovation

It should not be assumed from the outset that trade secrets promote innovation. The European Commission seems to take a too simplistic view by presuming an innovative nature of trade secrets based alone on the fact that, in contrast to IPRs, the rights of trade secret holders are not exclusive. The Commission states in the Proposal for the Trade Secrets Directive that "in the interest of innovation and to foster competition, the provisions of this Directive should not create any exclusive right on the know-how or information protected as trade secrets". ⁵⁶

⁵¹ One of the incentives said to be provided by trade secret law is that "it encourages businesses to engage in wider (albeit limited) dissemination of information than they otherwise would, thus increasing the likelihood of knowledge spillovers" (OECD Trade Policy Paper No. 162, supra fn. 3, pp. 10-11).

⁵² As stated by the U.S. Supreme Court in *Kewanee Oil*: "Trade secret law promotes the sharing of knowledge, and the efficient operation of industry; it permits the individual inventor to reap the rewards of his labor by contracting with a company large enough to develop and exploit it" (Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470, 493 (1974)).

⁵³ M.J. Madison (2011), Open Secrets, in R.C. Dreyfuss & K.J. Strandburg (Eds.), The Law and Theory of Trade Secrecy, pp. 222-245.

⁵⁴The importance of trade secrets to SMEs is stressed also by the European Commission (Explanatory Memorandum, supra fn. 42, p. 3).

⁵⁵ Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470, 481 (1974).

⁵⁶ Proposal for the Trade Secrets Directive (supra fn. 6), recital 10. See also the Explanatory Memorandum, supra fn. 42, p. 3 ("The holder of a trade secret does not have exclusive rights over the information covered by the trade secret"), p. 6 ("At the same time, competition should not be restricted as no exclusive rights are being granted and any competitor is free to independently acquire the knowledge protected by the trade secret (including by reverse-engineering)").

Yet, firstly, even exclusive rights (IPRs), according to the prevailing theory of complementarity, do not stand in conflict with competition law; on the contrary, they both aim at promoting dynamic competition.⁵⁷ Secondly, even though trade secret holders are not granted exclusive rights, they may restrict competition and hinder innovation, as was shown by the *Microsoft* case.⁵⁸ Competition law concerns in the case were not so much related to the exclusivity of rights, but rather to the fact that the relevant (interoperability) information was kept secret.⁵⁹

Yet, it is not argued here that trade secrets cannot promote innovation at all. Quite the contrary: trade secrets are important for innovation. The Commission, for example, alludes to the potential of trade secrets to promote "soft innovation" which would be generated by the knowledge which goes beyond a patentable subject matter. On the other hand, trade secret law may often protect investment. As *Reichman* puts it, "the distinctive characteristic of trade secrecy law is that it *protects investment in innovation as such*" (emphasis in original). Thus, at the end of the day, a number of factors may be decisive on whether trade secrets will promote or hinder innovation. Some of these factors may be the features of the industry, the type of a trade secret, the degree of market power of a trade secret holder etc.

2.2.2 Legal Certainty and Innovation

As unpredictable and dynamic as it is, innovation needs legal instruments that are stable. Legal uncertainty could negatively impact innovation. Although the fragmentation of the legal regimes for trade secret protection in the EU has been claimed by the European Commission to be a barrier for trade and innovation, ⁶³

⁵⁷ Guidelines on the application of Article 101 of the Treaty on the Functioning of the European Union to technology transfer agreements, [2014] OJ C 89/03, para. 7; U.S. Department of Justice and the Federal Trade Commission, Antitrust Guidelines for the Licensing of Intellectual Property of 6 April 1995, para. 1. See also J. Drexl (2008), Is there a "More Economic Approach" to Intellectual Property and Competition Law?, in J. Drexl (Ed.), Research Handbook on Intellectual Property and Competition Law, pp. 35–36.

⁵⁸ CFI, Microsoft v. Commission, T-201/04, EU:T:2007:289.

⁵⁹ See G. Surblytė (2011), The Refusal to Disclose Trade Secrets as an Abuse of Market Dominance – *Microsoft* and Beyond, pp. XLVII+263.

⁶⁰ See, for example, Baker & McKenzie (2013), Study on Trade Secrets and Confidential Business Information in the Internal Market of April 2013, supra fn. 33, pp. 85–108.

⁶¹ The Explanatory Memorandum, supra fn. 42, p. 3. The European Commission stresses the role of trade secrets, which goes beyond patent protection to include "non-technological innovation" (ibid.).

⁶² J.H. Reichman (2011), How Trade Secrecy Law Generates a Natural Semicommons of Innovative Know-How, in R.C. Dreyfuss & K.J. Strandburg (Eds.), The Law and Theory of Trade Secrecy, p. 187.

⁶³ Explanatory Memorandum, supra fn. 42, pp. 6–7: "Existing national rules thus render cross-border network R&D and innovation less attractive and more difficult". See also the Proposal for the Trade Secrets Directive (supra fn. 6), recital 7.

this does not necessarily create legal uncertainty. Effective trade secret protection is in place in all Member States of the EU. The existing differences in national legal frameworks may certainly increase transaction costs. However, they do not necessarily diminish incentive mechanisms, in particular bearing in mind that many aspects of trade secrets can be agreed upon by contract.

Hence, it might be more important to identify gaps of regulation in trade secret law which could possibly increase legal uncertainty and create innovation barriers. This currently seems to be the case with reverse engineering. Given the diverging statutory provisions and scattered case-law both in the EU and in the U.S., reverse engineering—or to be more precise, the boundaries of reverse engineering—may indeed create legal uncertainty. Innovation thus risks being endangered.

TRIPS in the preamble, recital 1, stipulates that "Members, desiring to reduce distortions and impediments to international trade, and taking into account the need to promote effective and adequate protection of intellectual property rights ..." have agreed on the provisions of TRIPS. The passage is identical to the corresponding one in the Ministerial Declaration on the Uruguay Round⁶⁴ and expresses the primary purposes of negotiating TRIPS. Recalling that the Ministerial Declaration dates from 1986, the goals of the Uruguay Round reflect the Zeitgeist: reducing impediments to international trade fits well into that context. Yet, in the light of a rapidly evolving modern economy and the dynamic competition that is taking place, 65 trade-related aspects of IPRs in the language of TRIPS may need to be supplemented by innovation-related aspects going beyond TRIPS. In doing so, it would be important to harmonize the boundaries of trade secret protection, so that trade secret law would stand not only in harmony throughout and outside the EU, but also in balance with the IP system and competition law. If the Proposal for the Trade Secrets Directive provides a model which enhances TRIPS in such a manner that it constitutes a "TRIPS-plus" model, it could be considered to be followed not only within, but also outside the EU. After all, the importance of trade secrets is not limited to any one territory, but has rather been growing globally.

⁶⁴ Ministerial Declaration on the Uruguay Round (MIN.DEC as of 20 September 1986): "In order to reduce the distortions and impediments to international trade, and taking into account the need to promote effective and adequate protection of intellectual property rights, and to ensure that measures and procedures to enforce intellectual property rights do not themselves become barriers to legitimate trade, the negotiations shall aim to clarify GATT provisions and elaborate as appropriate new rules and disciplines" (p. 7).

⁶⁵ See also C.R. McManis (1996), Taking TRIPS on the Information Superhighway: International Intellectual Property Protection and Emerging Computer Technologies, 41 Vill. L. Rev. 1996, 207, 287: "... TRIPS contributes little of substance to either the ongoing 'interoperability' debate or the emerging debate over the protection of intellectual property on the information superhighway".

3 A Legal Framework for Trade Secrets: The Scope of Protection and Its Limits

The international provision that provides a legal framework for trade secret protection is Article 39 TRIPS. Accordingly, trade secrets are to be protected in the framework of the law against unfair competition. ⁶⁶ This is important for the boundaries of trade secret protection, in particular as regards the forms of discovery of information. As part of discovery, reverse engineering is considered a legitimate way of gaining information. Yet, reverse engineering is possible only as long as a trade secret exists in the first place. The latter disappears with a loss of secrecy.

3.1 A Requirement of Secrecy for a Trade Secret

Among the requirements for a trade secret, secrecy could be deemed to be the core one. There is no trade secret without secrecy. In terms of TRIPS, "secret information" is defined as information "not ... generally known among or readily accessible to persons within the circles that normally deal with the kind of information in question" (Article 39(2)(a) TRIPS).

There is no international standard on when information could be considered as "generally known". 68 It depends on the circle of persons to whom the information is known; information loses secrecy as soon as "the number of knowing persons exceeds a certain quota of the interested circles". 69 What a "certain quota of the interested circles" means is not entirely clear. For example, *Carvalho* suggests that secrecy is maintained until the last person (or even the last competitor) in the circle that normally deals with the information gets that information. 70 Yet, apart from potential competition law concerns in terms of collusion, this view—if assessed together with other requirements for a trade secret—raises the question of whether a trade secret that is possessed by almost all competitors would still be capable of giving a competitive advantage to its holders. A competitive advantage that would normally arise from secrecy reduces with a growing number of competitors who

⁶⁶C.M. Correa (2007), Trade Related Aspects of Intellectual Property Rights, p. 372: "... there was no attempt in the negotiation of the TRIPS Agreement to go beyond the Paris Convention in determining minimum standards with regard to unfair competition. Article 39 relies on the Convention for the determination of which conducts may be deemed commercially unfair."

⁶⁷ The requirements for a trade secret under TRIPS are secrecy (Article 39(2)(a) TRIPS), commercial value because of secrecy (Article 39(2)(b) TRIPS) and reasonable steps taken by a trade secret holder to maintain secrecy (Article 39(2)(c) TRIPS).

⁶⁸ M. Peter & A. Wiebe (2013), in J. Busche, P.-T. Stoll & A. Wiebe (Eds.), TRIPs, Artikel 39, para. 19.

⁶⁹ I. Meitinger (2011), TRIPS Agreement, Article 39, in T. Cottier & P. Véron (Eds.), Concise International and European IP Law, p. 115.

⁷⁰ N.P. de Carvalho (2008), The TRIPS Regime of Antitrust and Undisclosed Information, p. 233.

learn the trade secret.⁷¹ It could thus be argued that it would have to be decided on a case-by-case basis whether information is still secret considering the number of persons who know the trade secret and bearing in mind that such tools as confidentiality agreements may be used for maintaining secrecy.

Whether information is or is not readily accessible is a complex issue. Neither TRIPS nor the Proposal for the Trade Secrets Directive (which in Article 2(1)(a) includes the same wording as Article 39(2)(a) TRIPS) specify when information may be considered as "readily accessible". For example, the comment on Section 1 UTSA (which uses the term "readily ascertainable" explains that "information is readily ascertainable if it is available in trade journals, reference books, or published materials. Often, the nature of a product lends itself to being readily copied as soon as it is available on the market, 73 (emphasis added). The latter passage touches upon a source of much controversy, namely: whether secrecy may be destroyed by putting a product on the market. This is not a purely academic issue—on the contrary, the question has been addressed on both sides of the Atlantic, ⁷⁴ and there are numerous cases in the UK with conflicting views on whether information is readily apparent when the product in which it is contained is freely marketed.⁷⁵ Yet, for example in Germany, the marketing of a product is not considered to entail disclosure. ⁷⁶ For determining secrecy, it is rather decisive whether information could be accessed without extensive effort in terms of time and costs.⁷⁷ Although it lacks uniformity, the notion of secrecy is important in general and may be relevant in cases of software in particular—the latter is often publicly distributed in object code by keeping a source code secret. However, the courts in the U.S. have confirmed a trade secret for software written in an object code and did not consider the

Stoll & A. Wiebe (Eds.), Artikel 39, para. 20 (with further references to relevant case-law).

⁷¹R. Kraßer (1970), Der Schutz des Know-How nach deutschem Recht, GRUR 1970, 587, 588.

⁷² According to *Carvalho*, both terms should be understood as synonymous (N.P. de Carvalho (2008), The TRIPS Regime of Antitrust and Undisclosed Information, p. 231).

⁷³ National Conference of Commissioners on Uniform State Laws, Uniform Trade Secrets Act with 1985 Amendments, p. 6.

⁷⁴R.P. Merges, S.P. Menell & M.A. Lemley (2012), Intellectual Property in the New Technological Age, pp. 60–61.

 ⁷⁵ See T. Aplin (2013), Reverse Engineering and Commercial Secrets, 66 CLP 2013, 341, 347-355.
 ⁷⁶ H. Harte-Bavendamm (1990), Wettbewerbsrechtliche Aspekte des Reverse Engineering von Computerprogrammen, GRUR 1990, 657, 660; M. Peter & A. Wiebe (2013), in J. Busche, P.-T.

⁷⁷ A. Ohly (2014), in A. Ohly & O. Sosnitza (Eds.), Gesetz gegen den unlauteren Wettbewerb, § 17, paras. 9-10. See also H. Harte-Bavendamm (1990), Wettbewerbsrechtliche Aspekte des Reverse Engineering von Computerprogrammen, GRUR 1990, 657, 660 ("Nicht geheim ist, was von jedem Interessenten ohne größere Schwierigkeiten und Opfer in Erfahrung gebracht werden kann"), see also p. 661; M. Peter & A. Wiebe (2013), in J. Busche, P.-T. Stoll & A. Wiebe (Eds.), TRIPs, Artikel 39, para. 20.

⁷⁸ C.R. McManis (1996), Taking TRIPS on the Information Superhighway: International Intellectual Property Protection and Emerging Computer Technologies, 41 Vill. L. Rev. 1996, 207, 250.

use of the software to mean a loss of secrecy.⁷⁹ Being too complex an issue to be discussed in short, the question whether putting a product on the market would destroy secrecy cannot be completely addressed here. It should nevertheless be noted that the answer to this question may depend on how complex a trade secret and a product itself is and thus on how easy it would be to recognize a trade secret by a simple observation of a product. Yet, the notion of secrecy is not only important for clarifying whether a trade secret existed in the first place. It also impacts the assessment of the boundaries of trade secret protection, in particular in terms of reverse engineering.

3.2 Reverse Engineering

Although it often appears in software industries, reverse engineering is not limited to them. ⁸⁰ Technological as well as chemical products may be taken apart for the purposes of reverse analysis. ⁸¹ As a compromise whereby a trade secret holder can keep information secret while leaving it free to be discovered, reverse engineering presents an important balance of trade secrets with a system of IP and is crucial to innovation.

3.2.1 Reverse Engineering: A Status Quo After TRIPS

Neither in the main provision on the protection of undisclosed information (Article 39) nor in the provisions addressing computer programs (Article 10) does TRIPS explicitly mention reverse engineering.⁸² The term "undisclosed"

⁷⁹ Trandes Corp. v. Guy F. Atkinson Co., 798 F.Supp. 284, 288 (D. Md. 1992). "Even those who obtained MV/ADEX and were able to *use* MV/ADEX were unable to discover its trade secrets because MV/ADEX was distributed only in its object code form, which is essentially unintelligible to humans. An infringer may be liable for misappropriating trade secrets when it loads and runs a computer program in its object code form, even if the infringer never understands exactly how the program works." (emphasis in original) (Data General Corp. v. Grumman Systems Support Corp., 825 F. Supp. 340, 359 (D. Mass. 1993) citing Trandes Corp. v. Guy F. Atkinson Co., 798 F.Supp. 284, 288 (D. Md. 1992)).

⁸⁰ See e.g. Chicago Lock Co. v. Fanberg, 676 F.2d 400 (9th Cir. 1982).

⁸¹ H. Harte-Bavendamm (1990), Wettbewerbsrechtliche Aspekte des Reverse Engineering von Computerprogrammen, GRUR 1990, 657, 658.

⁸² A. Ohly (2009), Reverse Engineering: Unfair Competition or Catalyst for Innovation?, in W. Prinz zu Waldeck und Pyrmont et al. (Eds.), Patents and Technological Progress in a Globalized World, p. 538; P. Samuelson & S. Scotchmer (2001-2002), The Law and Economics of Reverse Engineering, 111 Yale L.J. 2001–2002, 1575, 1577. See also J.H. Reichman (2011), How Trade Secrecy Law Generates a Natural Semicommons of Innovative Know-How, in R.C. Dreyfuss & K.J. Strandburg (Eds.), The Law and Theory of Trade Secrecy, pp. 185-200 ("Unfortunately, the drafters of Article 39, which tracked the Uniform Trade Secrets Act (UTSA) in the United States, failed expressly to mention lawful reverse engineering", ibid., p. 186).

information" in Article 39 is broad and does not specify what kind of information (technological, commercial etc.) is meant to be covered. R3 The choice of the neutral term "undisclosed information" was, however, a result of TRIPS negotiations in order, firstly, to avoid any link to the national legal systems in which a trade secret, know-how, confidential information etc. could have a different meaning, and secondly, to stress the "undisclosed" character of information. Yet, "undisclosed information" does not indicate "whether information which can only be made available through a costly and time-consuming reverse analysis is to be considered as "undisclosed".

As reverse engineering was left to be regulated by national laws, a legal situation after TRIPS differed not only on both sides of the Atlantic (the U.S. and the EU), but also among the single Member States of the EU.

In the U.S., reverse engineering is legitimate. In the landmark *Kewanee Oil v. Bicron Corp.* case, the U.S. Supreme Court stated that "a trade secret law, however, does not offer protection against discovery by fair and honest means, such as by independent invention, accidental disclosure, or by so-called reverse engineering".⁸⁷ In a similar way, a comment on Section 1 of the Uniform Trade Secrets Act (UTSA) lists "reverse engineering" among the proper means for discovering information.⁸⁸

The situation is different in the Member States of the EU. In Germany, ⁸⁹ for example, reverse engineering may be captured by Section 17(2) No. 1⁹⁰ of the Act Against Unfair Competition (UWG), in particular by Section 17(2) No. 1 lit. a,

⁸³ M. Peter & A. Wiebe (2013), in J. Busche, P.-T. Stoll & A. Wiebe (Eds.), TRIPs, Artikel 39, para.
7. The scope of protection afforded to software is not implied by Article 39 TRIPS (C.R. McManis (1996), Taking TRIPS on the Information Superhighway: International Intellectual Property Protection and Emerging Computer Technologies, 41 Vill. L. Rev. 1996, 207, 221, 225-226).

⁸⁴ Conference on Trade and Development (2005), Resource Book on TRIPS and Development, p. 521; M. Peter & A. Wiebe (2013) in J. Busche, P.-T. Stoll & A. Wiebe (Eds.), TRIPs, Artikel 39, para. 7.

⁸⁵ C.M. Correa (2007), Trade Related Aspects of Intellectual Property Rights, p. 368.

⁸⁶ A. Ohly (2009), Reverse Engineering: Unfair Competition or Catalyst for Innovation?, in W. Prinz zu Waldeck und Pyrmont et al. (Eds.), Patents and Technological Progress in a Globalized World, p. 538.

⁸⁷ Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470, 476 (1974).

⁸⁸ National Conference of Commissioners on Uniform State Laws, Uniform Trade Secrets Act with 1985 Amendments, p. 5.

⁸⁹ For further reading see F. Schweyer (2012), Die rechtliche Bewertung des Reverse Engineering in Deutschland und den USA.

⁹⁰ Section 17(2) No. 1 stipulates: "Anyone who, without authorization, for competitive purposes, or for his personal gain, or for the benefit of a third party, or with the intent of causing damage to the entrepreneur procures or secures for himself a commercial or industrial secret by the: a) utilization of technical devices or means, b) physical reproduction of the secret information or c) misappropriation of an object or device incorporating the secret ..." (Translation from M. Knospe (2014), Chapter 15: Germany, in M.F. Jager (Ed.), Trade Secrets Throughout the World, Volume 2, pp. 77–78).

which condemns an unauthorized procurement or securing of a trade secret by the utilization of technical devices or means. As early as 1935, the *Reichsgericht* in the case *Stiefeleisenpresse* held that taking apart the machine, which was used for the production of boot irons, and making a copy of it amounted to the acts of unfair competition. In the UK, case-law on reverse engineering is fairly sparse and inconsistent. A relationship between reverse engineering and the obligation of confidence is not always clear-cut. Aplin notes that reverse engineering is an underexplored issue for English confidentiality law, and pleads for introducing a reverse-engineering exception as part of the law of confidence, based not least on the argument that this would be highly conducive to legal certainty.

In light of such a legal situation in the Member States, it is a welcome development that the Proposal for the Trade Secrets Directive explicitly addresses reverse engineering. In the Explanatory Memorandum to the Proposal for the Directive, the European Commission categorizes reverse engineering as a legitimate way to obtain information. In the words of the Commission, "at the same time, competition should not be restricted as no exclusive rights are being granted and any competitor is free to independently acquire the knowledge protected by the trade secret (including by reverse engineering)". ⁹⁸

In the Proposal for the Directive which was drafted by the European Commission, ⁹⁹ Article 4(1)(b) stipulated that "the observation, study, disassembly or test of

⁹¹ J. Brammsen (2014), in P.W. Heermann & J. Schlingloff (Eds.), Münchener Kommentar zum Lauterkeitsrecht, Vor § 17, para. 88; H. Harte-Bavendamm (2013), in H. Harte-Bavendamm & F. Henning-Bodewig (Eds.), UWG, § 17, para. 22; for a critical approach see A. Ohly (2014), in A. Ohly & O. Sosnitza (Eds.), Gesetz gegen den unlauteren Wettbewerb, § 17, paras. 26-26a. *Harte-Bavendamm* notes that, whereas reverse engineering can be captured by Section 17(2) No. 1 of the Act Against Unfair Competition, so-called "forward programming" can fall under Section 17(2) No. 2 (H. Harte-Bavendamm (1990), Wettbewerbsrechtliche Aspekte des Reverse Engineering von Computerprogrammen, GRUR 1990, 657, 663). *Harte-Bavendamm* furthermore points out that reverse engineering of software can possibly fall also under Section 18 of the Act Against Unfair Competition (ibid., p. 664).

⁹² Stiefeleisenpresse (22 November 1935), GRUR 1936, 183 (149 RGZ (1936), 329).

⁹³ For a critical view see A. Ohly (2014), Der Geheimnisschutz im deutschen Recht: Heutiger Stand und Perspektiven, GRUR 2014, 1, 7; A. Ohly (2009), Reverse Engineering: Unfair Competition or Catalyst for Innovation?, in W. Prinz zu Waldeck et al. (Eds.), Patents and Technological Progress in a Globalized World, pp. 541-543, 550-551.

⁹⁴ See T. Aplin (2013), Reverse Engineering and Commercial Secrets, 66 CLP 2013, 341, 346.

⁹⁵ Ibid., 356 et seq.

⁹⁶ Ibid., 341.

⁹⁷ Ibid., in particular 341, 363 et seq.

⁹⁸ The Explanatory Memorandum, supra fn. 42, p. 6. Although the second part of this sentence shows a positive development in terms of expressing legitimacy of reverse engineering, the first part of the sentence needs to be criticized for a too simplistic view that non-exclusive rights do not pose a danger to competition. The *Microsoft* case has shown the contrary (CFI, Microsoft v. Commission, T-201/04, EU:T:2007:289; see also G. Surblytė (2011), The Refusal to Disclose Trade Secrets as an Abuse of Market Dominance – *Microsoft* and Beyond, pp. XLVII+263).

⁹⁹ Proposal for the Trade Secrets Directive, supra fn. 6.

a product or object that has been made available to the public or that it is lawfully in the possession of the acquirer of the information" was to be considered as a lawful means for the acquisition of a trade secret. No further exceptions were included in the provision. Yet, the Council of the European Union introduced several changes to the Proposal of the Commission. ¹⁰⁰ Article 4(1)(b) was amended as follows:

The acquisition of trade secrets shall be considered lawful when obtained by any of the following means: . . . (b) observation, study, disassembly or test of a product or object that has been made available to the public or that it is lawfully in the possession of the acquirer of the information who is free from any legally valid duty to limit the acquisition of the trade secret. (emphasis added)

3.2.2 Reverse Engineering and Its Limits

A primary basis for taking apart a product is its ownership. ¹⁰¹ For example, Mr Justice Jacob, as he then was, stated in *Mars UK Ltd v. Teknowledge Ltd* that "what the owner has is the full right of ownership. With that goes an entitlement 'to dismantle the machine to find out how it works and tell anyone he pleases'". ¹⁰² A pre-condition for this is, however, the lawful acquisition of a product. ¹⁰³

The Proposal for the Trade Secrets Directive lists two alternatives as a pre-condition for reverse engineering to be considered lawful, namely: a product or object has either "been made available to the public" or "is lawfully in the possession of the acquirer of the information". The first alternative is relatively self-explanatory, although it opens up the debate on whether making a product available to the public by putting it on the open market does not destroy secrecy in the first place. The second alternative of a product "lawfully in the possession of the acquirer of the information" needs to be analysed carefully. Since lawful possession

¹⁰⁰ Proposal of the Council of the European Union, supra note 47.

¹⁰¹ P. Samuelson & S. Scotchmer (2001-2002), The Law and Economics of Reverse Engineering, 111 Yale L.J. 2001–2002, 1575, 1583.

¹⁰² Mars UK Ltd v. Teknowledge Ltd., [2000] F.S.R. 138, 149.

¹⁰³ This is, for example, explicitly mentioned, in the comment on Section 1 of the UTSA, which explains that the acquisition of the product which is reverse-engineered "must, of course, also be by a fair and honest means, such as purchase of the item on the open market for reverse engineering to be lawful" (National Conference of Commissioners on Uniform State Laws, Uniform Trade Secrets Act with 1985 Amendments, p. 5). For a broader discussion on what constitutes a legal acquisition of a product see T. Aplin (2013), Reverse Engineering and Commercial Secrets, 66 CLP 2013, 341, 375-376.

is not "ownership", this provision alludes to license agreements, such as software licensing. 104

The Directive on legal protection of computer programs ¹⁰⁵ (hereinafter: the Software Directive) provides for copyright protection for "the expression in any form of a computer program" (Article 1(2)) and in Article 4 restricts some acts, including any reproduction of a computer program. Yet, although "ideas and principles which underlie any element of a computer program, including those which underlie its interfaces", do not fall under copyright protection (Article 1(2) of the Software Directive), access to the information contained in software may sometimes be possible only by means of reproduction. 106 Article 6 of the Software Directive thus contains an exception allowing such access through the reproduction of the code decompilation—if exercised to a limited extent, i.e. for achieving interoperability. Information obtained through decompilation may not be used for creating "a computer program substantially similar in its expression" (Article 6(2)(c) of the Software Directive). Going beyond decompilation, reverse engineering can extend to analysing the ideas and principles of a computer program by mere observation of it. These acts do not fall under Article 6 of the Software Directive, but are listed in Article 5(3), which allows the observation, studying and testing (though not copying) of a computer program while performing certain acts, i.e. loading, displaying, running, transmitting and storing the program. ¹⁰⁷ In this way, the acts under Article 5(3) are not bound by restrictions which apply under Article 6. 108

If ideas or principles, including algorithms and interfaces, are covered by a trade secret, the provisions of the proposed Trade Secrets Directive would come into play. The current Proposal for the Directive addresses reverse engineering in Article 4(1)(b). Yet, as amended by the Council of the European Union, the provision contains a possibility to restrict reverse engineering based on "any legally

¹⁰⁴ For the historical background on creating a legal construct for licensing software instead of selling it see M.A. Lemley (1994-1995), Intellectual Property and Shrinkwrap Licenses, 68 S. Cal. L. Rev. 1994–1995, 1239, 1241 et seq. As mentioned by the author, the roots of software licensing go back to the willingness of software vendors to protect their trade secrets (pp. 1244-1245). *Lemley* thereby concludes that "perhaps at one time shrinkwrap licenses were necessary to make it clear that software vendors owned intellectual property rights in their products. That is no longer true, if it ever was." (p. 1291).

¹⁰⁵ Directive 2009/24/EC of the European Parliament and of the Council on the legal protection of computer programs of 23 April 2009, OJ L 111/16.

¹⁰⁶ For example, in cases when those ideas and principles cannot "be determined by studying the mere performance of a program" (T. Dreier (1991), The Council Directive of 14 May 1991 on the Legal Protection of Computer Programs, 13 EIPR 1991, 319, 323, 324).

¹⁰⁷ Article 5(3) of the Software Directive stipulates: "The person having a right to use a copy of a computer program shall be entitled, without the authorization of the right holder, to observe, study or test the functioning of the program in order to determine the ideas and principles which underlie any element of the program if he does so while performing any of the acts of loading, displaying, running, transmitting or storing the program which he is entitled to do".

¹⁰⁸ T. Dreier (1991), The Council Directive of 14 May 1991 on the Legal Protection of Computer Programs, 13 EIPR 1991, 319, 323.

valid duty to limit the acquisition of a trade secret". A systematic analysis of the Proposal reveals that what is meant by such a legally valid duty is a contractual restriction.

A Contractual Restriction on Reverse Engineering

Recital 10 of the Proposal for the Trade Secrets Directive, as amended by the Council of the European Union, reads as follows:

In the interest of innovation and to foster competition, the provisions of this Directive should not create any exclusive right on the know-how or information protected as trade secrets. Thus, independent discovery of the same know-how or information remains possible. Reverse engineering of a lawfully acquired product is a lawful means of acquiring information except when otherwise agreed by contract. The freedom of entering into such contractual arrangements may however be limited by law, such as it is the case of Article 5(3) of Directive 2009/24/EC of the European Parliament and of the Council. ¹⁰⁹ (footnote omitted) (emphasis added)

In the initial version of the Proposal for the Trade Secrets Directive drafted by the European Commission there was no indication of whether an acquisition of a trade secret through reverse engineering could be contracted away. Thereby, the Commission left a gap: although Article 8, second paragraph, of the Software Directive states that contractual provisions that are "contrary to Article 6 or to the exceptions provided in Article 5(2) and (3) shall be null and void", Article 8, first paragraph, of the Software Directive stipulates that "the provisions of this Directive shall be without prejudice to any other legal provisions such as those concerning . . . trade secrets" (emphasis added). In this way, interface information, for example, could have been held secret and protected from reverse engineering on the basis of a contract. This issue was raised by *Dreier* as early as 1991 in the context of the Software Directive¹¹⁰ and it becomes even more important in the light of the proposed Trade Secrets Directive, which explicitly addresses reverse engineering.

The Council of the European Union added to the Proposal that the acquisition of a trade secret through reverse engineering is lawful as long as such an acquisition is not restricted by a contract. The only limits to freedom of contract are implied by the reference to Article 5(3) of the Software Directive. Yet, for the sake of precision

¹⁰⁹ Proposal of the Council of the European Union, supra fn. 47, recital 10.

¹¹⁰ See T. Dreier (1991), The Council Directive of 14 May 1991 on the Legal Protection of Computer Programs, 13 EIPR 1991, 319, 325: "In this respect, however, one interpretation problem merits particular attention. Since Article 9(1) first sentence leaves trade-secret protection intact [fn. 60: To this Article 9(1) second sentence, which limits the effect of contractual provisions, does not apply], it might be argued that interface information could still be retained, not on the basis of copyright, but as a trade secret by way of contractual restrictions placed on the buyer or licensee of the program." Article 9(1) first sentence of the Directive 91/250/EEC (14 May 1991) correlates to Article 8, first paragraph, of the Directive 2009/24/EC (23 April 2009); Article 9(1) second sentence of the Directive 91/250/EEC correlates to Article 8, second paragraph, of the Directive 2009/24/EC.

it has to be noted that the provision that sets the limits to contractual freedom in the Software Directive is Article 8, not Article 5(3). Article 8 refers to Article 5(3) by stating that contractual restrictions that contradict this provision will be null and void. In order to be legally precise, the passage would have to be drafted as follows: "the freedom of entering into such contractual arrangements may however be limited by law, such as is the case of the contractual provisions which are contrary to Article 6 or to the exceptions provided for in Article 5(2) and Article 5(3) of the Software Directive".

Article 5(3) is certainly important for reverse engineering. Yet, subject to judicial interpretation, the scope of Article 5(3) is not precisely clear.

In SAS Institute v. World Programming 111 the European Court of Justice (the ECJ) was asked, by the High Court of Justice of England and Wales, for a preliminary ruling on the scope of a software license. Among the questions referred to the ECJ was whether Article 5(3) was to be interpreted in such a way that a licensee of a computer program may "observe, study or test the functioning of that program in order to determine the ideas and principles which underlie any element of the program, in the case where that person carries out acts covered by that licence with a purpose that goes beyond the framework established by the licence". 112 The ECJ was also asked whether the purpose of observing the functioning of a computer program had an effect on whether the licensee could invoke the exception set out in Article 5(3). The defendant (World Programming Ltd) was accused by SAS to have used the "Learning Edition" of SAS Institute's program in breach of the terms of the license, which restricted it to non-production purposes. 114 Importantly, the defendant did not decompile and did not have access to a source code. 115 The ECJ, though holding that a licensee was "entitled to determine the ideas and principles which underlie any element of the computer program", 116 said that such a determination could be "carried out within the framework of the acts permitted by the licence". 117 Specifically, it held that:

In those circumstances, the answer to Questions 6 and 7 is that Article 5(3) of the Directive 91/250 must be interpreted as meaning that a person who has obtained a copy of a computer program under a licence is entitled, without the authorization of the owner of the copyright, to observe, study or test the functioning of that program so as to determine the ideas and principles which underlie any element of the program, in the case where that person carries out acts covered by that licence and acts of loading and running necessary for the use of the

¹¹¹ ECJ, SAS Institute Inc. v. World Programming Ltd, C-406/10, EU:C:2012:259.

¹¹² Ibid., paras. 28, 47.

¹¹³ Ibid., para. 49.

¹¹⁴ Ibid., paras. 27, 48.

¹¹⁵ Ibid., para. 44: "... WPL did not have access to the source code of SAS Institute's program and did not carry out any decompilation of the object code of that program. By means of observing, studying and testing the behaviour of SAS Institute's program, WPL reproduced the functionality of that program by using the same programming language and the same format of data files".

¹¹⁶ Ibid., paras. 50, 54.

¹¹⁷ Ibid., para. 55.

computer program, and on condition that that person does not infringe the exclusive rights of the owner of the copyright in that program. (emphasis added)

The text of the passage is identical to Article 5(3) of the Software Directive, except for the slight difference in the wording of "acts which are covered by the licence". Thus, the ECJ, on the one hand, says that discovering the ideas behind a computer program is allowed, yet on the other hand, it draws the boundaries of such a discovery by way of the acts permitted by the license. In their comment on the case, *Gervais* and *Derclaye* observe that "the court's interpretation of Article 5(3) of the Directive is difficult to decrypt and may be interpreted to imply that licensors can prevent the discovery of ideas and principles behind a computer program, a matter which in our view would contradict the Directive's purpose. However, we think that this cannot be what the court in all logic intended".

The ambiguity of the judgment of the ECJ was pointed out by Mr Justice Arnold, who decided the case in the High Court of Justice of England and Wales. ¹²⁰ He first of all noted that "... neither the CJEU's answer to Questions 6-7 nor its reasoning was very clear". ¹²¹ Regarding the passage of the judgment of the ECJ that "the determination of ideas and principles may be carried out within the framework of the acts permitted by the licence", Mr Justice Arnold held: "While this might at first blush be taken to suggest that it may not be done outside the scope of the licence, I think that counsel for WPL was right to submit that the better view is that the acts referred to are the acts of loading, displaying, running, transmitting or storing the program referred to in the preceding paragraph". ¹²²

Furthermore, Mr Justice Arnold stressed that the correct reading of the judgment of the ECJ suggested that the purpose for which the acts are carried out does not

¹¹⁸ Ibid., para. 62.

¹¹⁹ D. Gervais & E. Derclaye (2012), The Scope of Computer Program Protection after SAS: Are We Closer to Answers?, 34 EIPR 2012, 565, 572. They note that "... it is difficult to reconcile how the court can, on the one hand, say that the purpose of Article 5(3) is to ensure that any licensee can discover the ideas behind a program even if the licence agreement says otherwise and, on the other hand, say that the determination of the ideas must be done within the framework of the acts permitted by the licence. It would then be simple for a licensor to prevent such discovery in all cases via the licence agreement but this would be hard to reconcile (teleologically at least) with the Directive." (Ibid., p. 571). Yet, the authors further discuss whether the judgment of the ECJ should be interpreted in the context of the facts of the case, particularly in the framework of non-production purpose of the licence, but consider it also problematic (see ibid., 571).

¹²⁰ SAS Institute Inc. v. World Programming Limited, [2013] R.P.C. 17.

¹²¹ Ibid., para. 64.

¹²² Ibid., para. 68.

affect the rights of the licensee under Article 5(3). Thus, in the end, Mr Justice Arnold held that the defendant, despite having carried out acts which went beyond the scope of the license, did not lose the protection of Article 5(3). 124

In light of the ambiguity of the judgment of the ECJ in SAS, it may not be easy for the national courts to interpret its guidance when they have to rule on the validity of the contractual restrictions on reverse engineering. From a comparative point of view, the question may arise whether any helpful guidance could be gained from the other side of the Atlantic.

In the U.S. the assessment of contractual constraints on reverse engineering (mostly in the framework of shrinkwrap licenses) is controversial. ¹²⁵ In *Vault Corporation v. Quaid Software Limited* case ¹²⁶ the restriction in Vault's license agreement against decompilation or disassembly was held by the U.S. Court of Appeals, Fifth Circuit, to be unenforceable. ¹²⁷ Thus, the Court's holding in *Vault* is similar to the provisions of the EU Software Directive that stipulate that contractual restrictions on reverse engineering are null and void. ¹²⁸ Yet, the outcome in other cases was different. In *Davidson & Associates v. Jung*—even though the appellants relied on *Vault Corporation v. Quaid Software Limited*—the U.S. Court of Appeals, Eighth Circuit, did not agree that software owner's state law claims of a breach of

¹²³ Ibid., para. 71: "In my view it is also significant that the Court does not say in [54]–[59] that the licensee's entitlement is affected by the *purpose* for which it carries out the acts of loading, displaying, running, transmitting or storing the program, and in particular whether that is a licensed purpose or an unlicensed purpose. Consistently with the reading of those paragraphs that I have suggested above, this indicates that the answer to the question posed at [49] is no." However, the judgment of the ECJ could also be read the other way, since, for example, *Gervais* and *Derclaye* reached exactly the opposite conclusion: "the question the court had to answer was whether the *purpose* of the study or observation of the functioning of the computer program has an effect on whether the person who has obtained the licence may invoke Article 5(3). In short, the answer is yes." (D. Gervais & E. Derclaye (2012), The Scope of Computer Program Protection after SAS: Are We Closer to Answers?, 34 EIPR 2012, 565, at 570).

¹²⁴SAS Institute Inc. v. World Programming Limited, [2013] R.P.C. 17, para. 73. "I therefore conclude that WPL's use of the Learning Edition was within Article 5(3), and to the extent that such use was contrary to the licence terms they are null and void by virtue of Article 9(1), with the result that none of WPL's acts complained of was a breach of contract or an infringement of copyright" (Ibid., para. 79).

¹²⁵ See M.A. Lemley (2006-2007), Terms of Use, 91 Minn. L. Rev. 2006–2007, 459, 460, 467-470; M.A. Lemley (1994-1995), Intellectual Property and Shrinkwrap Licenses, 68 S. Cal. L. Rev. 1994–1995, 1239, 1248-1259; C.R. McManis (1996), Taking TRIPS on the Information Superhighway: International Intellectual Property Protection and Emerging Computer Technologies, 41 Vill. L. Rev. 1996, 207, 239 et seq.; R.P. Merges, S.P. Menell & M.A. Lemley (2012), Intellectual Property in the New Technological Age, p. 80; P. Samuelson & S. Scotchmer (2001-2002), The Law and Economics of Reverse Engineering, 111 Yale L.J. 2001–2002, 1575, 1626 et seq.

¹²⁶ Vault Corporation v. Quaid Software Limited, 847 F.2d 255 (5th Cir. 1988).

¹²⁷ Ibid., 270

¹²⁸ C.R. McManis (1996), Taking TRIPS on the Information Superhighway: International Intellectual Property Protection and Emerging Computer Technologies, 41 Vill. L. Rev. 1996, 207, 241-244.

the end-user license agreement (EULA) that prohibited reverse engineering were preempted by federal copyright law (thus, the software end-user license was said to be enforceable). ¹²⁹ The Court followed the U.S. Court of Appeals, Federal Circuit, which in *Bowers v. Baystate Technologies, Inc.* ¹³⁰ held that:

[W]hile the Fifth Circuit has held that a state law prohibiting all copying of a computer program is preempted by the federal Copyright Act, *Vault Corp. v. Quaid Software, Ltd.*, 847 F.2d 255 (5th Cir. 1988), no evidence suggests the First Circuit would extend this concept to include private contractual agreements supported by mutual assent and consideration. . . . Thus, case law indicates the First Circuit would find that private parties are free to contractually forego the limited ability to reverse engineer a software product under the exemptions of the Copyright Act. ¹³¹

Reverse engineering was thus said to have constituted a breach of contract. ¹³² In the dissenting opinion, Circuit Judge Dyk, disagreeing on the finding that "the contract claim was not preempted by federal law", noted that "... the majority has rendered a decision in conflict with the only other federal court of appeals decision that has addressed the issue – the Fifth Circuit decision in *Vault Corp. v. Quaid Software Ltd.*...". ¹³³ Pointing out that *Vault* directly supported the preemption of the state law which validated the restrictions in shrinkwrap licenses, Circuit Judge Dyk noted that "... from a preemption standpoint, there is no distinction between a state law that explicitly validates a contract that restricts reverse engineering (*Vault*) and general common law that permits such a restriction (as here)". ¹³⁴ He criticized ¹³⁵ the majority for having relied on the case *ProCD*, *Inc. v. Zeidenberg*. ¹³⁶ In *ProCD*, the Seventh Circuit of the U.S. Court of Appeals held that a shrinkwrap license was enforceable. ¹³⁷ The Court in that case, namely, stated that "... a copyright is a right against the world. Contracts, by contrast, generally affect only

¹²⁹ Davidson & Associates v. Jung, 422 F.3d 630 (8th Cir. 2005): "In *Vault*, plaintiffs challenged the Louisiana Software License Enforcement Act, which permitted a software producer to impose contractual terms upon software purchasers provided that the terms were set forth in a license agreement comporting with the statute. . . . Unlike in *Vault*, the state law at issue here neither conflicts with the interoperability exception under 17 U.S.C. § 1201(f) nor restricts rights given under federal law. Appellants contractually accepted restrictions on their ability to reverse engineer by their agreement to the terms of the TOU and EULA. . . . By signing the TOUs and EULAs, Appellants expressly relinquished their rights to reverse engineer." (638–639).

¹³⁰ Bowers v. Baystate Technologies, Inc., 320 F.3d 1317 (Fed. Cir. 2003).

¹³¹ Ibid., 1325-1326.

¹³² Ibid., 1327, 1334.

¹³³ Ibid., 1335.

¹³⁴ Ibid., 1337.

¹³⁵ Ibid., 1337-1338.

¹³⁶ ProCD, Inc. v. Zeidenberg, 86 F.3d 1447 (7th Cir. 1996).

¹³⁷ Ibid., 1455.

their parties; strangers may do as they please, so contracts do not create 'exclusive rights'". 138

Circuit Judge Dyk pointed out that the background of the ProCD case was different (breach of a license in terms of a violation of restriction to use software for non-commercial purposes)¹³⁹ and stressed the statement of the Seventh Circuit in ProCD "... we think it prudent to refrain from adopting a rule that anything with the label 'contract' is necessarily outside the preemption clause". ¹⁴⁰

While the cases discussed relate more to the issue of preemption by federal copyright law, more recently the United States District Court, C.D. California, 141 dismissed a claim of misappropriation of trade secrets. The plaintiff alleged that the defendants, after having downloaded a trial version of its software, reverseengineered it in violation of the EULA and used the obtained information to create and distribute a competing software product. 142 The Court pointed out that a misappropriation includes improper means and noted that reverse engineering in itself is, by law, not considered as such. 143 Citing a concurring opinion of Justice Moreno to a California Supreme Court judgment, the Court refused to accept that a statutory definition could be changed by a contract which would convert reverse engineering into "improper means". 144 The Court also rejected a plaintiff's argument—which was raised in the alternative—that the EULA created a "duty to maintain secrecy", which the defendants allegedly breached by reverseengineering. The Court stated that whereas such a duty could exist "in the context of a fiduciary duty or an employment agreement", it did not arise from a license agreement such as that in the case at hand. 145

The diversity of judicial opinions in the U.S. does not give clear guidance on the legitimacy of contractual restrictions on reverse engineering. Many cases were scrutinized through the lense of the pre-emption issue with an argument that

 $^{^{138}}$ Ibid., 1454. Cited in Bowers v. Baystate Technologies, Inc., 320 F.3d 1317 (Fed Cir. 2003), 1325.

¹³⁹ Bowers v. Baystate Technologies, Inc., 320 F.3d 1317, 1337–1338 (Fed. Cir. 2003).

¹⁴⁰ ProCD, Inc. v. Zeidenberg, 86 F.3d 1447, 1455 (7th Cir. 1996). Cited in Bowers v. Baystate Technologies, Inc., 320 F.3d 1317, 1338 (Fed. Cir. 2003).

¹⁴¹ Aqua Connect, Inc. v. Code Rebel, LLC, 2012 WL 469737 (C.D. Cal., 2012).

¹⁴² Ibid., 1.

¹⁴³ Ibid., 2.

¹⁴⁴ Ibid., 2 (citing DVD Copy Control Ass'n, Inc. v. Bunner, 31 Cal. 4th 864, 901 n. 5 (2003) (Moreno, J., concurring)). In the words of the Court, "... from the plain language of the statute, reverse engineering must be combined with some other improper action in order for it to form the basis of a cognizable misappropriation claim. ... reverse engineering is not an improper means of acquiring trade secret information when defendants acquire the item, from which the information is derived, through fair and honest means. ... Though a breach of the EULA may support a cognizable breach of contract claim, the Court finds that the mere presence of the EULA does not convert reverse engineering into an 'improper means' within the definition of California trade secret law." (Ibid., 2).

¹⁴⁵ Ibid., 3.

contractual restrictions do not create exclusive rights, so they did not interfere with federal copyright law. Yet, apart from the debate on whether shrinkwrap licenses could be considered a contract in the first place, ¹⁴⁶ the question is whether the freedom of contract to enter into such contractual restrictions could be limited on any grounds other than intersection with copyright law.

In the Proposal of the Council of the European Union recital 10 states that "the freedom of entering into such contractual arrangements may however be limited by law". Due to minimum harmonization, it will depend on the Member States, and first and foremost, their national contract laws, how the provisions of the Directive relevant to reverse engineering (Article 4(1)(b) and recital 10) will be implemented. Article 4(1)(b) states that the acquisition of a trade secret is legitimate if the acquirer "is free from any legally valid duty to limit the acquisition of the trade secret" (emphasis added). Thereby, a possibility to restrict reverse engineering by contract is anchored in the provision. Recital 10, however, stipulates that contractual restrictions on reverse engineering "may be limited by law" (emphasis added). The wording of the latter provision gives a margin of discretion to the Member States to decide on the limits of contractual freedom. Recital 10 further refers to Article 5(3) of the Software Directive, so that limits on contracts should be set at least in software industries. Otherwise, discrepancies could in fact be triggered with the Software Directive (Article 8, second paragraph). 147 The Proposal does not specify whether contractual freedom could be limited in industries other than software. An impact of contractual restrictions on reverse engineering may possibly depend on the features of the industry. The question thereby is what impact such contractual restrictions could have on competition and thus on innovation—an issue which has scarcely been addressed by the courts, but which may be highly important in the context of setting limits to contractual freedom.

Impact on Competition and Innovation

The Proposal for the Trade Secrets Directive provides in Article 4(1)(b) for a possibility to restrict the acquisition of a trade secret, thus reverse engineering as such. Yet, apart from the risk that a trade secret may get disclosed, ¹⁴⁸ there are not many reasons to restrict reverse engineering as such—the latter consists merely of

¹⁴⁶ See M.A. Lemley (1994-1995), Intellectual Property and Shrinkwrap Licenses, 68 S. Cal. L. Rev. 1994–1995, 1239, 1283 et seq. As pointed out by the author, "shrinkwraps are not contracts at all in any meaningful sense of the word" (Ibid., p. 1291). See also M.A. Lemley (2006-2007), Terms of Use, 91 Minn. L. Rev. 2006–2007, 459.

¹⁴⁷ In similar lines discussing the overlap of copyright and trade secret protection in software see T. Aplin (2013), Reverse Engineering and Commercial Secrets, 66 CLP 2013, 341, 372-373.

¹⁴⁸ Samuelson and Scotchmer point out that such a risk would not be high due to a low incentive of a reverse-engineer to disclose information in order to preserve the competitive advantage provided by keeping information secret (P. Samuelson & S. Scotchmer (2001-2002), The Law and Economics of Reverse Engineering, 111 Yale L.J. 2001–2002, 1575, 1658).

an analysis of a product. Yet, rarely will reverse engineering be carried out without any intent to make further use of the information gained, so that it is post-reverse-engineering activities that appear to be more important, in particular, from the point of view of competition. ¹⁴⁹ In the light of a freedom to imitate, ¹⁵⁰ could a contractual restriction on reverse engineering be claimed to be justified merely in order to avoid imitation risks?

First of all, one could recall the statement of Justice O'Connor in *Bonito Boats*: "From their inception, the federal patent laws have embodied a careful balance between the need to promote innovation and the recognition that imitation and refinement through imitation are both necessary to invention itself and the very lifeblood of a competitive economy".¹⁵¹

By enabling access to information, reverse engineering can in fact be carried out for both purposes: innovation or mere imitation. Although in manufacturing industries reverse engineering has been said to be undertaken to produce directly competing stand-alone products, Samuelson and Scotchmer note that ... a legal rule favoring reverse engineering of traditional manufactured products is economically sound. ... Given that the costs and time required for reverse engineering already protect most innovators, a ban on reverse engineering is unnecessary. Whether information gained through reverse engineering will be used for imitation or for innovation may depend on an industry and to a fair degree on market conditions. Thus, in contrast to imitation, which increases price competition, reverse engineering may also serve to enhance dynamic competition in the market. In light of competitive pressure, reverse engineering may breed innovation.

¹⁴⁹ P. Samuelson & S. Scotchmer (2001-2002), The Law and Economics of Reverse Engineering, 111 Yale L.J. 2001–2002, 1575, 1650-1651. See also T. Aplin (2013), Reverse Engineering and Commercial Secrets, 66 CLP 2013, 341, 342.

¹⁵⁰ See T. Dreier (2013), in T. Dreier & G. Schulze (Eds.), Urheberrechtsgesetz, Einl., para. 37, § 69a, para. 10; I.M. Harlacher (2012), Schutz vor Reverse Engineering im deutschen Recht, 11 ReWir 2012, 1, 23.

¹⁵¹ Bonito Boats, Inc. v. Thunder Craft Boats, Inc., 489 U.S. 141, 146 (1988).

¹⁵² "In some cases reverse engineering is a necessary or at least useful step in the process of further innovation, in other cases it may only enable imitation" (A. Ohly (2009), Reverse Engineering: Unfair Competition or Catalyst for Innovation?, in W. Prinz zu Waldeck und Pyrmont et al. (Eds.), Patents and Technological Progress in a Globalized World, p. 538). See also T. Aplin (2013), Reverse Engineering and Commercial Secrets, 66 CLP 2013, 341, 342: "Competitors may seek to reverse engineer in order to replicate the same or similar product at a cheaper price, while others may be more interested in producing an improved or complementary product" (case-law examples omitted).

¹⁵³ P. Samuelson & S. Scotchmer (2001-2002), The Law and Economics of Reverse Engineering, 111 Yale L.J. 2001–2002, 1575, 1613.

¹⁵⁴ Ibid., 1590.

¹⁵⁵ "On the positive side, a right to reverse-engineer has a salutary effect on price competition and on the dissemination of know-how that can lead to new and improved products" (P. Samuelson & S. Scotchmer (2001-2002), The Law and Economics of Reverse Engineering, 111 Yale L.J. 2001–2002, 1575, 1590).

In particular in "Schumpeterian markets", reverse engineering or—to be more precise—threatening to reverse-engineer¹⁵⁶ may increase competitive pressure, which is very much needed for the incentives to innovate. Given a potentially negative impact on competition and innovation, restricting reverse engineering and thereby reducing competitive pressure merely by a contract is hard to justify.

In particular in software industries, which are characterized by interoperability, standards and network effects, it can be crucial to gain information for further development of the products. ¹⁵⁷ In contrast to other industries, discovering the ideas and principles of a computer program may be triggered by the need to achieve compatibility or may serve for programming the interfaces. ¹⁵⁸ A restriction on reverse engineering may thus be merely used as a convenient tool to influence market conditions—yet, by way of a contract. ¹⁵⁹

Going beyond the boundaries of trade secret law, contractual restrictions prohibiting reverse engineering can in fact have a farther-reaching effect. Trade secret law, although it protects information that is kept secret, leaves the door open for discovery of information, including reverse-engineering. Contractually banning reverse engineering would block such access and enable a trade secret holder to enjoy a scope of protection which is not meant to be granted by trade secret law. Moreover, such contractual restrictions may empower a trade secret holder to influence market conditions in terms of both price competition and competition in innovation. Thus, by counterbalancing the interests of a trade secret holder with those of the society and, moreover, competition law, a need may arise to intervene in the freedom of contract in order to restore the boundaries set by trade secret law.

Article 40(2) TRIPS allows Member States to specify "in their legislation licensing practices or conditions that may in particular cases constitute an abuse of intellectual property rights having an adverse effect on competition in the

¹⁵⁶ Ibid., 1589, 1650.

¹⁵⁷On reverse engineering in the markets characterized by interoperability see P. Samuelson & S. Scotchmer (2001-2002), The Law and Economics of Reverse Engineering, 111 Yale L.J. 2001–2002, 1575, 1613 et seq. According to the authors, "... in markets for products heavily dependent on intellectual property rights, such as computer software, there is reason to worry about contractual restrictions of reverse engineering" (ibid., 1660).

¹⁵⁸ I.M. Harlacher (2012), Schutz vor Reverse Engineering im deutschen Recht, 11 ReWir 2012, 1, 20; H. Harte-Bavendamm (1990), Wettbewerbsrechtliche Aspekte des Reverse Engineering von Computerprogrammen, GRUR 1990, 657, 659. See also P. Samuelson & S. Scotchmer (2001-2002), The Law and Economics of Reverse Engineering, 111 Yale L.J. 2001–2002, 1575, 1580, 1613, 1615, 1654.

¹⁵⁹See also P. Samuelson & S. Scotchmer (2001-2002), The Law and Economics of Reverse Engineering, 111 Yale L.J. 2001–2002, 1575, 1653: "Our advice to policymakers is: Before banning a means of reverse engineering, require convincing evidence that this means has market-destructive consequences. Realize that existing market participants may want a ban mainly because they wish to protect themselves against competitive entry. Any restriction on reverse engineering should be tailored so that it does not reach more than parasitic activities."

relevant market". ¹⁶⁰ Contractual restrictions on reverse engineering, in particular in software industries, may create exactly this impact. In cases in which access to information, such as interfaces, is crucial for compatibility, a contractual restriction on reverse engineering a trade secret could potentially have the same (anticompetitive) effects that would arise if reverse engineering was impossible *de facto*. The latter was the case in *Microsoft*, in which the dominant undertaking was held under Article 102 TFEU to have abused its dominant position by refusing to disclose information needed for interoperability and was ordered under competition law to disclose its trade secrets. ¹⁶¹ The Proposal for the Trade Secrets Directive states that "the measures provided for in this Directive should not be used to restrict competition unduly in a manner contrary to [the TFEU]". ¹⁶² Since contractual restrictions on reverse engineering may have this effect, enforcing them may indeed be difficult to justify. ¹⁶³

Yet, since reverse engineering by its nature presents a risk of a trade secret loss, it can certainly also influence the incentives of a trade secret holder. *Samuelson* and *Scotchmer* point out that "... incentives to invest in platform development will be lower if reverse engineering is lawful". ¹⁶⁴ The question thereby arises how to find a balance between the (competing) incentives of reverse-engineers on the one hand and trade secret holders on the other hand in light of the overall interest of society in competition and innovation.

3.3 Balancing the Protection of Trade Secrets in and Beyond the System of IP

Despite the pathos with which the European Commission stated in the Proposal for the Trade Secrets Directive that "every IPR starts with a secret", ¹⁶⁵ in reality, trade secrets exist in the system of IP, or to be more precise, they co-exist with the system of IP. They are closest to patents, often complementing them ¹⁶⁶ or standing as an alternative to them. Although trade secrets go beyond patents in

 $^{^{160}}$ On Article 40(2) TRIPS see O. Brand (2013), in J. Busche, P.-T. Stoll & A. Wiebe (Eds.), TRIPs, Artikel 40, paras. 24 et seq.

¹⁶¹ CFI, Microsoft v. Commission, T-201/04, EU:T:2007:289.

¹⁶² Proposal for the Trade Secrets Directive, supra fn. 6, recital 27.

¹⁶³ See also P. Samuelson & S. Scotchmer (2001-2002), The Law and Economics of Reverse Engineering, 111 Yale L.J. 2001–2002, 1575, 1630.

¹⁶⁴ Ibid., 1621. They, however, still do not argue that "reverse engineering should be made illegal in order to protect platform developers" (p. 1622).

¹⁶⁵ Explanatory Memorandum, supra fn. 42, p. 2.

¹⁶⁶ See W. Cornish, D. Llewelyn & T. Aplin (2013), Intellectual Property, p. 322: "in actual practice, patents are often secured for a central invention, while much that is learned in the process of bringing it into commercial production is tied up as secret 'know-how' by means of confidence undertakings".

terms of a broader scope of a subject-matter, they provide a far weaker protection. As stated in *Kewanee Oil*, "where patent law acts as a barrier, trade secret law functions relatively as a sieve". ¹⁶⁷ This is particularly true with regard to reverse engineering, which is meant to weaken trade secret protection as compared to that granted to patents. ¹⁶⁸ In addition, it presents a compromise between the benefit to society of disclosing information in case of a grant of a patent and the commercial benefit to a trade secret holder of keeping information secret. ¹⁶⁹

A balanced justification for reverse engineering is in fact implied by the definition of a trade secret. Article 39(2)(a) TRIPS defines "secret information" as information "not . . . generally known among or readily accessible to persons within the circles that normally deal with the kind of information in question". Contrary to Section 1(4)(i) of the UTSA, which defines secrecy as "not being generally known to, and not being readily ascertainable by proper means", ¹⁷⁰ TRIPS does not mention "proper means" when defining secrecy. ¹⁷¹ Carvalho suggests that the requirement of "readily accessible" under Article 39(2)(a) should nevertheless be read in conjunction with Article 39(2), meaning "readily accessible in a manner that conforms to honest commercial practices". ¹⁷² Such a reading indeed illustrates a balance of interests between a trade secret holder and a reverse-engineer.

For example, the comment to Section 1 UTSA states: "... if reverse engineering is *lengthy and expensive*, a person who discovers the trade secret through reverse

¹⁶⁷ Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470, 490 (1974).

¹⁶⁸ Ibid., 489-490: "Trade secret law provides far weaker protection in many respects than the patent law. [footnote omitted] While trade secret law does not forbid the discovery of the trade secret by fair and honest means, e.g., independent creation or reverse engineering, patent law operates 'against the world', forbidding any use of the invention for whatever purpose for a significant length of time. The holder of a trade secret also takes a substantial risk that the secret will be passed on to his competitors, by theft or by breach of a confidential relationship, in a manner not easily susceptible of discovery or proof."

¹⁶⁹ P. Samuelson & S. Scotchmer (2001-2002), The Law and Economics of Reverse Engineering, 111 Yale L.J. 2001–2002, 1575, 1649–1650. On the tension between the "incentive to invent" theory and the "incentive to disclose" theory see K.J. Strandburg (2004), What Does the Public Get? Experimental Use and the Patent Bargain, Wis. L. Rev. 2004, 81, 104–107.

¹⁷⁰ National Conference of Commissioners on Uniform State Laws, Uniform Trade Secrets Act with 1985 Amendments, p. 5. From a historic point of view, it is interesting to observe that a different formulation was used in the *Restatement (First) of Torts* published by the American Law Institute. Section 757, Comment (b) (1939) stated that "a substantial element of secrecy must exist, so that, except by *the use of improper means*, there would be difficulty in acquiring the information" (emphasis added).

¹⁷¹ On the origins of the wording of this provision in the framework of the negotiations of TRIPS see N.P. de Carvalho (2008), The TRIPS Regime of Antitrust and Undisclosed Information, p. 231.
¹⁷² Ibid., p. 232. See also J. Brammsen (2014), in P.W. Heermann & J. Schlingloff (Eds.), Münchener Kommentar zum Lauterkeitsrecht, § 17, para. 15: "Geheim sind demnach nur Tatsachen, die nicht offenkundig, dh. weder allgemein noch dergestalt zugänglich sind, dass für jeden an ihr Interessierten die tatsächliche Möglichkeit besteht, sie unter Zuhilfenahme lauterer Mittel auf normalem Weg ohne nennenswerte Mühen kennen zu lernen".

engineering can have a trade secret in the information obtained from reverse engineering". ¹⁷³ (emphasis added)

The acquisition of a trade secret by proper means alludes to the effort and time needed for discovering a trade secret. The costliness of reverse engineering and, in turn, the lead time provided for a trade secret holder are indeed said to present a balanced solution for reverse engineering in the framework of trade secret law.¹⁷⁴ Although the digital tools and other means available in a modern society may facilitate reverse engineering and thereby lower costs and reduce the length of time needed for accessing the information,¹⁷⁵ the definition of a trade secret still seems to create a balance with reverse engineering. If information is readily—thus, easily—accessible by proper means, let alone by mere observation of a product, the existence of a trade secret would be denied by definition.¹⁷⁶ The weight in the interpretation of "readily accessible" thus seems to lie on the word "readily". This word, in turn, relates to another requirement for a trade secret, namely: "reasonable efforts of a trade secret holder to maintain secrecy". In this way, the scope of the efforts of a reverse-engineer, on the one hand, and those of a trade secret holder, on the other hand, are put on either plate of a scale to balance each other.¹⁷⁷

Although contractual restrictions, such as those relating to employees, customers etc., are usually deemed to be reasonable measures to keep information secret, ¹⁷⁸ it is debatable whether contractual bans on reverse engineering could also be considered as such. They rather intervene with the balance predefined by the nature of trade secrets. In fact, if reverse engineering was to be rendered unlawful by a contract, a reverse analysis would mean a breach of such a contract. Bearing in mind that a breach of contract is mentioned in footnote 10 of Article 39(2) TRIPS as an example of "a manner contrary to honest commercial practices", reverse engineering would become part of unlawful conduct. All this would contradict the nature of trade secrets in general and the roots of Article 39 TRIPS in particular.

¹⁷³ National Conference of Commissioners on Uniform State Laws, Uniform Trade Secrets Act with 1985 Amendments, p. 6.

¹⁷⁴ P. Samuelson & S. Scotchmer (2001-2002), The Law and Economics of Reverse Engineering, 111 Yale L.J. 2001–2002, 1575, 1582, 1650, 1653.

¹⁷⁵ See also A. Ohly (2014), in A. Ohly & O. Sosnitza (Eds.), Gesetz gegen den unlauteren Wettbewerb, § 17, para. 10.

¹⁷⁶ The ease or difficulty of reverse engineering may play a role in strategic decisions on whether to patent the invention or whether to keep information secret. On self-disclosing and non-self-disclosing inventions and the role of the theories on "the incentive to invent" and "the incentive to disclose" see K.J. Strandburg (2004), What Does the Public Get? Experimental Use and the Patent Bargain, Wis. L. Rev. 2004, 81, 107 et seq.

¹⁷⁷ For example, as early as 1939, the *Restatement (First) of Torts*, published by the American Law Institute, listed several factors for assessing the existence of a trade secret. Among these factors were the following: "iii) the extent of measures taken by the owner to guard the secrecy of the information; . . . v) the amount of effort or money expended by him in developing the information; and vi) the ease or difficulty with which the information could properly be acquired or duplicated by others" (*Restatement (First) of Torts*, Section 757, Comment (b) (1939)).

¹⁷⁸ M. Peter & A. Wiebe (2013), in J. Busche, P.-T. Stoll & A. Wiebe (Eds.), TRIPs, Artikel 39, para. 23.

The compromise in TRIPS on the provision on undisclosed information was intended as protection against unfair competition. Thus, if a trade secret is acquired in a fair manner, it can basically be further used. ¹⁷⁹ Mechanisms such as unfair competition law and copyright law could further serve to tackle the problem of imitation and unfair behavior in the market.

The compromise in TRIPS to include trade secret protection in the law against unfair competition was meant to oppose a "stronger" protection of intellectual property rights. On the one hand, contractual restrictions do not grant exclusive rights. On the other hand, however, the effect such contractual restrictions can produce may go beyond the boundaries of a contract. ¹⁸⁰ Thus, contractual restrictions on reverse engineering, although they should bind merely the parties of the contract, may trigger a snow-ball effect, barring further use of a trade secret. ¹⁸¹

Contractual restrictions eliminate or at least reduce the risk of discovering information and may thereby prolong the "lead time" for a trade secret holder. A lead time advantage is normally considered one of the benefits provided by trade secret law for a trade secret holder, whereas reverse engineering is deemed to set limits on it. ¹⁸² From an economic point of view, *Samuelson* and *Scotchmer* point out that reverse engineering is actually one step in a four-stage development process, namely: awareness stage, reverse-engineering stage, implementation stage and introduction of a product to the market. ¹⁸³ Accordingly, the lead time of a trade secret holder can last long indeed. Bearing in mind that trade secret law does not provide for any term of protection for a trade secret (the latter disappears when secrecy is lost), banning reverse engineering may extend the lead time, and thereby trade secret protection, merely on the basis of a contract. Furthermore, whether the products manufactured on the basis of the reverse-engineered information will meet a market demand, is not at all certain and will mostly depend on various factors in the market, ¹⁸⁴ including consumer preferences. Thus, contractual

¹⁷⁹ Ibid., para. 9.

¹⁸⁰ See the Proposal of the Council of the European Union, supra fn. 47, Article 3(2), Article 3(3), Article 3(4).

¹⁸¹ M.A. Lemley (1994-1995), Intellectual Property and Shrinkwrap Licenses, 68 S. Cal. L. Rev. 1994–1995, 1239: "Contracts involving intellectual property frequently attempt to alter this balance, normally in favor of the intellectual property owners. Each of these contracts, however, affects not only the immediate parties, but also a host of potential third parties – users, subsequent inventors, and the general public. In other words, agreements to vary intellectual property law create externalities." (p. 1286). See also ibid., p. 1291: "[N]o two parties should be allowed to alter or avoid some aspect of intellectual property law where the result is to disadvantage others who are not a party to the contract".

¹⁸² C.R. McManis (1996), Taking TRIPS on the Information Superhighway: International Intellectual Property Protection and Emerging Computer Technologies, 41 Vill. L. Rev. 1996, 207, 223-224.

¹⁸³ P. Samuelson & S. Scotchmer (2001-2002), The Law and Economics of Reverse Engineering, 111 Yale L.J. 2001–2002, 1575, 1586-1588.

¹⁸⁴ Ibid., 1588 (according to the authors, some of the factors might be a brand of the product, high switching costs, etc.).

restrictions on reverse engineering broaden the limits of a trade secret and thereby go beyond the framework of protection which was meant for trade secrets in order to keep them in balance with the whole system of IP.

4 Conclusions

Almost 20 years after TRIPS, trade secrets have again entered the scene of the regulatory framework. The European Commission has raised the initiative to harmonize trade secret protection throughout the EU. The Commission focuses on the diversity of national legal provisions on trade secret protection and considers them as a barrier to cross-border trade and innovation. Diverse as they are, national legal provisions, although they may certainly raise transaction costs, do not necessarily create legal uncertainty—all Member States of the EU have effective protection of trade secrets and many aspects of trade secrets can be agreed upon by contract. Yet, one area of trade secret law seems to be in need of harmonization, namely: reverse engineering. Article 39 TRIPS remained silent on it and legal provisions and case-law differ not only on both sides of the Atlantic, but also within the EU. For example, while reverse engineering is explicitly deemed to be lawful in the U.S., in Germany it seems to be covered by the scope of Section 17 of the Act Against Unfair Competition. The latter provision foresees criminal liability. In the UK, reverse engineering is an "underexplored issue for English confidentiality law". 185 In light of this, it is highly important to harmonize the boundaries of trade secret protection, in particular those relating to a discovery of information. This is relevant not only for legal certainty—it is crucial for innovation. After all, as a compromise of keeping information secret, yet leaving it free to be discovered, reverse engineering presents a balanced approach to trade secrets as compared to IPRs (first and foremost, patents) and keeps the gates to innovation open.

The Proposal for the Trade Secrets Directive explicitly addresses reverse engineering as a lawful means to discover information which is kept secret (Article 4(1)(b)). Yet, the Proposal for the Directive, as amended by the Council of the European Union, provides for a possibility to restrict it by way of a contract (Article 4(1)(b), recital 10 of the proposed Directive). An example of setting limits to freedom of contract is given by reference to Article 5(3) of the Software Directive. The latter provision goes beyond decompilation (Article 6 of the Software Directive) by allowing the analysis of the ideas and principles by mere observation of a computer program. Article 8, second paragraph, of the Software Directive stipulates that such contractual provisions will be null and void that are contrary to Article 6 or to the exceptions provided in Article 5(2) and Article 5(3) of the Software Directive. At the same time, Article 8, first paragraph, leaves intact other areas of law, such as trade secret law, so that the proposed Directive on trade

¹⁸⁵ T. Aplin (2013), Reverse Engineering and Commercial Secrets, 66 CLP 2013, p. 341.

secret protection comes into play. Although the Proposal for the Trade Secrets Directive suggests that limits could be set on contractual restrictions on reverse engineering, it should be recalled that the scope of harmonization the Directive aims for is minimum harmonization. Accordingly, Member States have a margin of discretion while implementing the provisions relevant to reverse engineering in their national laws. This may not be an easy task given the ambiguous guidance from the ECJ in SAS. Any further guidance can hardly be gained from the other side of the Atlantic, since case-law on this matter in the U.S. is controversial.

Freedom of contract, on the one hand, enables parties to define any conditions of a contract which they agree upon. Yet, on the other hand, a contractual restriction on reverse engineering may have a negative effect on competition and innovation. Such contractual restrictions eliminate a threat to reverse-engineer (and thus decrease competitive pressure), which is of highest importance for innovation in general and for "Schumpeterian markets" in particular. Reducing the risk of reverse engineering on the basis of a contract may thus enable a trade secret holder to influence market conditions, which clearly goes beyond the scope of trade secret protection. In fact, maintaining reverse engineering free from restrictions in trade secret law is crucial for innovation. This is in particular so because trade secret law restricts access to information and thereby provides a trade secret holder with a "lead time" which corresponds to the difficulty, and thus the efforts of a reverseengineer, to discover a trade secret. By overstepping the boundaries of trade secret law, contractual restrictions on reverse engineering, although they do not necessarily render trade secrets exclusive rights, may intervene in the natural and unpredictable flow of innovation.

TRIPS addressed *trade-related* aspects of IP, which fit well into the context of the time when the Agreement was negotiated. Yet, in light of the modern economy and dynamic competition taking place, trade-related aspects may need to be supplemented by *innovation-related* aspects. For innovation, reverse engineering is of highest importance. TRIPS, however, remained silent on it. The Proposal for the Trade Secrets Directive, which anchors contractual restrictions to reverse-engineer without setting clear limits on them, can hardly be considered a "TRIPS plus" model which could be followed. It remains to be seen what the final compromise on the Trade Secrets Directive will be and how national provisions on reverse engineering will be implemented and whether they will stand in harmony at least in the EU. For the time being, a clear-cut rule seems to be lacking on both sides of the Atlantic. Such a rule is, however, highly needed in order to maintain competition and enhance innovation.

References

Ann, C. (2007), Know-How – Stiefkind des Geistigen Eigentums?, GRUR 2007, 39, Munich: C.H. Beck

Aplin, T. (2013), Reverse Engineering and Commercial Secrets, 66 CLP 2013, 341, Oxford: Oxford University Press

- Brammsen, J. (2014), in P.W. Heermann & J. Schlingloff (Eds.), Münchener Kommentar zum Lauterkeitsrecht, Vor § 17, 2nd ed., München: C.H. Beck
- Brammsen, J. (2014), in P.W. Heermann & J. Schlingloff (Eds.), Münchener Kommentar zum Lauterkeitsrecht, § 17, 2nd ed., München: C.H. Beck
- Brand, O. (2013) in J. Busche, P.-T. Stoll & A. Wiebe (2013), TRIPs, Artikel 2, 2nd ed., Köln: Heymanns
- Brand, O. (2013), in J. Busche, P.-T. Stoll & A. Wiebe (2013), TRIPs, Artikel 40, 2nd ed., Köln: Heymanns
- de Carvalho, N.P. (2008), The TRIPS Regime of Antitrust and Undisclosed Information, Alphen aan den Rijn: Kluwer Law International
- Coleman, A. (1992), The Legal Protection of Trade Secrets, London: Sweet & Maxwell
- Conference on Trade and Development (2005), Resource Book on TRIPS and Development, Cambridge: Cambridge University Press
- Cornish, W., Llewelyn, D. & Aplin, T. (2013), Intellectual Property, 8th ed., London: Sweet & Maxwell
- Correa, C.M. (2007), Trade Related Aspects of Intellectual Property Rights, Oxford: Oxford University Press
- Dessemontet, F. (2008), Protection of Trade Secrets and Confidential Information, in C.M. Correa & A. Yusuf (Eds.), Intellectual Property and International Trade: The TRIPS Agreement, pp. 271–292, 2nd ed., Alphen aan den Rijn: Kluwer Law International
- Dreier, T. (2013), in T. Dreier & G. Schulze (Eds.), Urheberrechtsgesetz, Einl.; § 69a, 4th ed., München: C.H. Beck
- Dreier, T. (1991), The Council Directive of 14 May 1991 on the Legal Protection of Computer Programs, 13 EIPR 1991, 319, London: Sweet & Maxwell
- Drexl, J. (2008), Is there a "More Economic Approach" to Intellectual Property and Competition Law?, in J. Drexl (Ed.), Research Handbook on Intellectual Property and Competition Law, pp. 27–53, Cheltenham: Edward Elgar
- Gervais, D. (2012), The TRIPS Agreement: Drafting History and Analysis, 4th ed., London: Sweet & Maxwell
- Gervais, D. & Derclaye, E. (2012), The Scope of Computer Program Protection after SAS: Are We Closer to Answers?, 34 EIPR 2012, 565, London: Sweet & Maxwell
- Ghidini, G. & Falce, V. (2011), Trade Secrets as Intellectual Property Rights: A Disgraceful Upgrading Notes on an Italian "Reform", in R.C. Dreyfuss & K.J. Strandburg (Eds.), The Law and Theory of Trade Secrecy, pp. 140–151, Cheltenham: Edward Elgar
- Harlacher, I.M. (2012), Schutz vor Reverse Engineering im deutschen Recht, 11 ReWir 2012, 1, Berlin: Logos Verlag
- Harte-Bavendamm, H. (1990), Wettbewerbsrechtliche Aspekte des Reverse Engineering von Computerprogrammen, GRUR 1990, 657, Munich: C.H. Beck
- Harte-Bavendamm, H. (2013), in H. Harte-Bavendamm & F. Henning-Bodewig (Eds.), UWG, § 17, 3rd ed., München: C.H. Beck
- Henning-Bodewig, F. (2015), TRIPS and Corporate Social Responsibility: Unethical Equals Unfair Business Practices? in H. Ullrich, R.M. Hilty, M. Lamping & J. Drexl (Eds.), TRIPS plus 20: From Trade Rules to Market Principles (p. 701), Heidelberg: Springer (this volume)
- Henning-Bodewig, F. (2013), International Protection against Unfair Competition, in F. Henning-Bodewig (Ed.), International Handbook on Unfair Competition, pp. 9–39, Munich/Oxford/Baden-Baden: Beck/Hart/Nomos
- Knaak, R., Kur, A. & Hilty, R.M. (2014), Comments of the Max Planck Institute for Innovation and Competition of 3 June 2014 on the Proposal of the European Commission for a Directive on the Protection of Undisclosed Know-How and Business Information (Trade Secrets) Against Their Unlawful Acquisition, Use and Disclosure of 28 November 2013, COM(2013) 813 Final, 45 IIC 2014, 953, Munich/Berlin: C.H. Beck/Springer
- Knospe, M. (2014), Chapter 15: Germany, in M.F. Jager (Ed.), Trade Secrets Throughout the World, Vol. 2, Eagan: Thomson/West

Kraßer, R. (1970), Der Schutz des Know-How nach deutschem Recht, GRUR 1970, 587, Munich: C.H. Beck

- Ladas, S.P. (1975), Patents, Trademarks, and Related Rights, Cambridge: Harvard University Press
 Lemley, M.A. (1994-1995), Intellectual Property and Shrinkwrap Licenses, 68 S. Cal. L. Rev.
 1994–1995, 1239, Los Angeles: University of Southern California
- Lemley, M.A. (2006-2007), Terms of Use, 91 Minn. L. Rev. 2006–2007, 459, Minneapolis: University of Minnesota Law School
- Madison, M.J. (2011), Open Secrets, in R.C. Dreyfuss & K.J. Strandburg (Eds.), The Law and Theory of Trade Secrecy, pp. 222–245, Cheltenham: Edward Elgar
- McManis, C.R. (1996), Taking TRIPS on the Information Superhighway: International Intellectual Property Protection and Emerging Computer Technologies, 41 Vill. L. Rev. 1996, 207, Villanova: Villanova University School of Law
- Meitinger, I. (2011), TRIPS Agreement, Article 39, in T. Cottier & P. Véron (Eds.), Concise International and European IP Law, 2nd ed., Alphen aan den Rijn: Kluwer Law International
- Merges, R.P., Menell, S.P. & Lemley, M.A. (2012), Intellectual Property in the New Technological Age, 6th ed., New York: Wolters Kluwer
- Ohly, A. (2009), Reverse Engineering: Unfair Competition or Catalyst for Innovation?, in W. Prinz zu Waldeck und Pyrmont et al. (Eds.), Patents and Technological Progress in a Globalized World, pp. 535–552, Berlin: Springer
- Ohly, A. (2014), Der Geheimnisschutz im deutschen Recht: Heutiger Stand und Perspektiven, GRUR 2014, 1, Munich: C.H. Beck
- Ohly, A. (2014), in A. Ohly & O. Sosnitza (Eds.), Gesetz gegen den unlauteren Wettbewerb, § 17, 6th ed., München: C.H. Beck
- Peter, M. & Wiebe, A. (2013), in J. Busche, P.-T. Stoll & A. Wiebe (Eds.), TRIPs, Artikel 39, 2nd ed., Köln: Heymanns
- Reichman, J.H. (2011), How Trade Secrecy Law Generates a Natural Semicommons of Innovative Know-How, in R.C. Dreyfuss & K.J. Strandburg (Eds.), The Law and Theory of Trade Secrecy, pp. 185–200, Cheltenham: Edward Elgar
- Samuelson, P. & Scotchmer, S. (2001-2002), The Law and Economics of Reverse Engineering, 111 Yale L.J. 2001–2002, 1575, New Haven: Yale Law School
- Sandeen, S.K. (2007), The Cinderella of Intellectual Property Law: Trade Secrets, in P.K. Yu (Ed.), Intellectual Property and Information Wealth: Issues and Practices in the Digital Age, pp. 399–420, Westport: Praeger
- Schultz, M.F. & Lippoldt, D.C. (2014), Approaches to Protection of Undisclosed Information (Trade Secrets) Background Paper, TAD/TC/WP(2013)21/FINAL, OECD Trade Policy Paper No. 162 of 22 January 2014, available at: http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=TAD/TC/WP(2013)21/FINAL&docLanguage=En (accessed 20 May 2015)
- Schweyer, F. (2012), Die rechtliche Bewertung des Reverse Engineering in Deutschland und den USA, Tübingen: Mohr Siebeck
- Strandburg, K.J. (2004), What Does the Public Get? Experimental Use and the Patent Bargain, Wis. L. Rev. 2004, 81, Madison: University of Wisconsin Law School
- Surblytė, G. (2011), The Refusal to Disclose Trade Secrets as an Abuse of Market Dominance *Microsoft* and Beyond, pp. XLVII+263 (Munich Series on European and International Competition Law, Vol. 28), Berne: Stämpfli
- Toulson, R.G. & Phipps, C.M. (2012), Confidentiality, 3rd ed., London: Sweet & Maxwell Ullrich, H. (1995), Technologieschutz nach TRIPS: Prinzipien und Probleme, GRUR Int. 1995,
- 623, Munich: C.H. Beck Wadlow, C. (2011), The Law of Passing-off: Unfair Competition by Misrepresentation, 4th ed., London: Sweet & Maxwell