ICTSD
International Centre for Trade and Sustainable Development

WORLD ECONOMIC FORUM
COMMITTED TO IMPROVING THE STATE OF THE WORLD

The E15 Initiative

STRENGTHENING THE GLOBAL TRADE AND INVESTMENT SYSTEM FOR SUSTAINABLE DEVELOPMENT

Interaction between Intellectual Property and Competition Laws

Maximiliano Santa Cruz Scantlebury and Pilar Trivelli

January 2016

E15 Expert Group on
Competition Policy and the Trade System

Think Piece

Co-convened with

bruegel

ACKNOWLEDGMENTS

Published by

International Centre for Trade and Sustainable Development (ICTSD)
7 Chemin de Balexert, 1219 Geneva, Switzerland
Tel: +41 22 917 8492 – E-mail: ictsd@ictsd.ch – Website: www.ictsd.org
Publisher and Chief Executive: Ricardo Meléndez-Ortiz

World Economic Forum
91-93 route de la Capite, 1223 Cologny/Geneva, Switzerland
Tel: +41 22 869 1212 – E-mail: contact@weforum.org – Website: www.weforum.org
Co-Publisher and Managing Director: Richard Samans

Acknowledgments

This paper has been produced under the E15Initiative (E15). Implemented jointly by the International Centre for Trade and Sustainable Development (ICTSD) and the World Economic Forum, the E15 convenes world-class experts and institutions to generate strategic analysis and recommendations for government, business, and civil society geared towards strengthening the global trade and investment system for sustainable development.

For more information on the E15, please visit www.e15initiative.org/

Santa Cruz Scantlebury: Director, Instituto Nacional de Propiedad Industrial (INAPI)
Trivelli: Department of Studies and Public Policy, INAPI

With the support of:

And ICTSD's Core and Thematic Donors:

Citation: Santa Cruz Scantlebury, Maximiliano and Pilar Trivelli. *Interaction Between Intellectual Property and Competition Laws*. E15Initiative. Geneva: International Centre for Trade and Sustainable Development (ICTSD) and World Economic Forum, 2015. www.e15initiative.org/

ISSN 2313-3805

ABSTRACT

An issue with great relevance today is the increasing interaction between intellectual property (IP) and competition. At first sight, IP and competition laws may seem to follow divergent objectives since one grants temporary monopolies and the other seeks to protect the market from monopolistic behaviors. However, a deeper observation leads to the finding that they share common rationales, which makes them interact in a complementary manner to each other in many cases. Both reasonable IP protection and effective antitrust enforcement are part of the global innovation system. The similarities and tensions between IP and competition are constantly present in the application of these bodies of law. Therefore, the interaction that IP and competition may have on different grounds should be analyzed and taken into account by each jurisdiction to adequately face the new challenges that this phenomenon has brought to the trade system.

This paper touches on some initiatives that seek to address these interactions in broad terms, proposing different paths to be followed to make IP and competition enhance each other's virtues and work together towards the development of social welfare. Further, it cites some examples of tensions that may arise when IP interacts with competition law and how they might be resolved in different ways according to the particularities of each jurisdiction.

There is a set of practices that can be recommended for promoting the approach in each country in the long term, based on different observed practices. The first course of action is to enhance the relation between competition and IP agencies. This may be done at different levels—from bringing IP and competition promotion functions into a single office, to promoting an informal more fluent relation among offices. A second policy priority recommendation is to develop long-term initiatives of analysis of the joint challenges of IP and competition, disregarding the form that IP and competition institutions relations may take. A third recommended line of action in the relation between agencies, in the long term, may be the publication of different type of soft law instruments that address these topics. This includes publishing joint guidelines and also memos from each authority. Finally, it may also be desirable that the relation between IP and competition be taken to the next level by formally considering the impact that IP norm setting may have on competition.

CONTENTS

LIST OF ABBREVIATIONS

BE	Block Exemption
CFI	Court of First Instance
DOJ	Department of Justice
EC	European Commission
ETSI	European Telecommunications Standards Institute
EU	European Union
FRAND	fair, reasonable and non-discriminatory
FTAs	free trade agreements
FTC	Federal Trade Commission
ICT	Information and Communication Technologies
INDECOPI	National Institute for the Defence of Competition and Protection of Intellectual Property
ISO	International Organization for Standard-ization
IP	Intellectual property
IPRs	Intellectual property rights
MFN	Most favoured nation
OECD	Organisation for Economic Co-operation and Development
PAE	Patent Assertion Entity
SCOTUS	Supreme Court of the United States
SEP	Standard essential patent
SSOs	Standard setting organizations
TEFU	Treaty on the Functioning of the European Union
TRIPS	Trade-Related Aspects of Intellectual Property Rights
US	United States
WGS	Working group server
WIPO	World Intellectual Property Organization
WTO	World Trade Organization

INTRODUCTION

The acceleration of innovation in today's globalized economy is making international trade grow each day, constantly raising new topics and challenges to achieve sustainable development. An issue with great relevance to this is the increasing interaction between intellectual property (IP) and competition.

At first sight, IP and competition laws may seem to follow divergent objectives since one grants temporary monopolies and the other seeks to protect the market from monopolistic behaviours. However, a deeper observation leads to the finding that they share common rationales, which makes them interact in a complementary manner to each other in many cases.[1]

Both reasonable IP protection and effective antitrust enforcement are part of the global innovation system. Intellectual property rights (IPRs) intend to provide incentives to innovators restricting the use of the knowledge they produce by allowing the imposition of charges on the use of that knowledge, thereby obtaining a return on their investment. IPRs promote investments in innovation by granting substantial, but time-limited, market power. Also, IP reduces transaction costs of customers by identifying products with their origin, ultimately promoting, through this recognition, the development of better products at lower costs. Antitrust laws promote a favourable environment for the growth of innovation. They also prevent dominant firms from harming or delaying innovation.[2]

These similarities and tensions between IP and competition are constantly present in the application of these bodies of law. This interaction is growing in importance, to the advanced industrial countries in particular, as the fund of exploitable ideas becomes more sophisticated and as their hopes for a successful economic future depend increasingly upon their superior corpus of new knowledge and fashionable conceits.[3] Therefore, the interaction that IP and competition may have on different grounds should be analyzed and taken into account by each jurisdiction to adequately face the new challenges that this phenomena has brought to the trade system.

This document will touch on some initiatives that seek to address these interactions in broad terms, proposing different paths to be followed to make IP and competition enhance each other's virtues and work together towards the development of societies' welfare. Further, we will see some examples of tensions that may arise when IP interacts with competition law and how they might be resolved in different ways according to the particularities of each jurisdiction.

TODAY'S INNOVATIVE ECONOMY

Various rankings have emerged over the years showing the most valuable brands in the world.[4] Aside from sharing a place in these lists, companies that are ranked in them have something else in common. They provide highly innovative goods and services. For example, in the Brandz100 ranking of 2015,[5] the first four most valuable brands correspond to technology companies (Apple, Google, Microsoft, and IBM), the fifth corresponds to a financial services/payment company (Visa) and the sixth and seventh to telecommunication providers (AT&T and Verizon).

As we can see, the most successful businesses in the world are mainly based on the development of new ideas, which are non-physical resources. There may be numerous incentives for the creation of new intangible developments. The pure enjoyment of creating, recognition among peers, and awards are some examples. Notwithstanding these, it has been argued that they are not always enough to encourage innovators to invest their resources in the creation of new developments. In this respect, the IP regime is part of society's innovation system, and its intent is to provide incentives to innovate by allowing innovators to restrict the use of the knowledge they produce through the imposition of charges on the use of that knowledge, thereby obtaining a return on their investment,[6] subject to temporal and other kinds of limitations.

Also, IP rights are used to identify products or services with their origin (product differentiation) through trademarks and geographical indications. This objective seeks to protect consumers by allowing them to know about the legitimacy of a product. Further, it allows them to reduce transaction costs, by permitting the recognition of the quality of a product or service through its distinctive signs. In the long term, IP

1 "The aims and objectives of patent and antitrust laws may seem, at first glance, wholly at odds. However, the two bodies of law are actually complementary, as both are aimed at encouraging innovation, industry and competition." *Atari Games Corp. v. Nintendo of America, Inc.*, 897 F.2d 1572, 1576 (Fed. Cir. 1990).

2 Pitofsky (2001: 542).

3 Cornish, Llewelyn and Aplin (2010: 7).

4 Such as the Interbrand, the Forbes, or the Brand Finance rankings.

5 The 2015 ranking is available at: http://www.brandz100.com/#/article/download-brandz-top-100-most-valuable-global-brands-2015-report/936?back_url=%2F.

5 Stiglitz (2008: 1.696).

promotes the development of better products or services since consumers usually prefer brands that provide the highest quality at the lowest price.

On the other hand, competition policies seek competitive and efficient markets to furnish better goods and services at the best price. Competition policies spur innovation, competitiveness, and efficiency among competitors, ultimately to enhance consumers´ welfare. To do so, antitrust laws prohibit and punish certain anti-competitive behaviour among market players. Another relevant way in which competition law complements IP is by challenging some abuses or misuses of IPRs when they overlap against competition policies.

As we can see, both competition law and IPR's ultimately seek to promote innovation and enhance consumer welfare.[7] In a society where IP plays a more relevant role each day as part of the innovation system, analysing its interaction with competition has become a matter of increasing importance. The challenge is to make a balanced combination of the rules that govern these institutions to ensure they serve the purposes that justify them. To do so, it is necessary to develop policy efforts that promote bringing IP and competition closer at all levels so that new challenges can be properly addressed by the relevant stakeholders on the best mode to promote development in each system.

SOME TOPICS OF INTERACTION

As said, there are multiple spheres where IP and competition interact. All these issues should be taken into account to address the new challenges of an international trade system. These interactions may arise either at the moment of granting IPRs (for example, over-broad rights due to low standards or poor quality examination); of using them (misuse of contractual licenses, for example, tying, bundling); or of enforcing them (anti-competitive litigation). Some interaction issues are common to several IPRs (for example, patents, copyrights and/or trademarks, exhaustion of rights –parallel importing), while others will be specific to one or only some IP rights (for example, patent pools).

This section reviews some of these interactions to raise an idea of how IP and competition laws converge and how their interaction may be addressed in different ways in accordance with each country's legislation and perspective on these matters.

Section 4 explores different experiences that have been developed to make IP and competition laws work together. Finally, Section 5 suggests some policy recommendations to enhance the interaction between the IP and competition legal regimes.

OVERBROAD RIGHTS DUE TO LOW STANDARDS OR OUTSPREAD EXAMINATION

The interaction of IP and competition laws can be observed as soon as an IPR application is filed since these rights are normally subject to registration. For instance, to get patent protection, an invention must be, first, within the patentable subject matter. This is a dynamic concept, and laws and rules around the world are constantly articulating the limits of what is patentable. Second, to obtain a patent an invention must have novelty, which means it must be new to the state of art. Third, to obtain patent protection an invention must have an inventive step. Finally, an invention must be susceptible of industrial application.

To grant an IP right, the patent office should conduct a thorough examination where compliance with the requirements established by law for the granting it is analyzed. In this context, many questions may arise such as what can be patented, what will be the extension of a specific patent, or how strict the patent office will be in analyzing patent requirements.

An analysis with low standards on the compliance with these patentability requirements may result in monopolies with a too broad spectrum. This may have anti-competitive effects and paralyze innovative developments in a particular sector, which goes against the very justification of IP. Leniency or strictness in the analysis is a constant issue in discussion and varies over time. The results of these decisions on the IP field have direct implications of the antitrust scenario.

An example of this can be seen in the evolution of this matter in the United States (US). In this country, in general, the interaction of decisions of the Patent Office and the Supreme Court has established relevant limits for the extension of IP monopolies.

In the 1960s, the *Brenner v. Manson* case in the Supreme Court of the United States (SCOTUS) confirmed the rejection of IPRs on a patent application over a new process for making a kind of steroid that had been screened for possible tumour-inhibiting effects. In this case, the conflict was over how the patentability test was to be applied to a chemical process that

7 These are widely accepted common goals of IP and competition laws. See, for example, paragraph 269 of the EC Guidelines on Horizontal Co-operation agreements and paragraph 7 of the EC Guidelines on the application of Article 81 of the EC Treaty to technology transfer agreements.

yielded an already known product whose utility—other than as a possible object of scientific inquiry—had not yet been proven. Protection was rejected since obtaining it over this kind of process in the chemical field, which had not been developed to the degree of a specific utility, would create a monopoly of knowledge that should be granted only if claims that it had been reduced to the production of a useful product were satisfied. Otherwise, the meets and bounds of that monopoly would have a precise delineation and may deter future innovations.

The court understood that patenting at a very early stage of an invention may give a too wide monopoly that blocks downstream development of related processes and may engross a vast, unknown, and perhaps unknowable area. Such a patent may confer power to block off whole areas of scientific development, without compensating benefit to the public. The basic quid pro quo contemplated by the US Constitution and the Congress for granting a patent monopoly is the benefit derived by the public from an invention with substantial utility. Unless and until a process is refined and developed to this point—where specific benefit exists in currently available form—there is insufficient justification for permitting an applicant to encroach what may prove to be a broad field.[8]

In the 1980s, in the *Diamond v. Chakrabarty* case, the SCOTUS determined that a live, human-made microorganism is a patentable subject matter under US law. According to this case title, 35 U.S.C. § 101 provides for issuing a patent to a person who invents or discovers "any" new and useful "manufacture" or "composition of matter." In this case the respondent filed a patent application relating to his invention of a human-made, genetically engineered bacterium capable of breaking down crude oil, a property which is possessed by no naturally occurring bacteria. A patent examiner's rejection of the patent application's claims for the new bacteria was affirmed by the Patent Office Board of Appeals on the ground that living things are not patentable subject matter under US patent law. The Court of Customs and Patent Appeals reversed, concluding that the fact that microorganisms are alive is without legal significance for the purposes of the patent law and that "anything under the sun that is made by man" is a patentable subject matter.[9]

This case had enormous impact since it allowed biotechnological patents, boosting development of this industry, and also its tendency towards enhancing the scope for patentability in this field. This enabled patent protection over genetically modified organisms and isolated human genes, an area of research that has increased exponentially over the last decade. Nowadays this issue has assumed special relevance with new biotechnological breakthroughs.

When patent claims on new technologies present unresolved legal issues, it typically takes years for it to reach the point of resolution in the courts, which rely on previous decisions involving technologies that are older still.[10] This was the case in the 2014 SCOTUS *Association for Molecular Pathology v. Myriad Genetics* ruling. In this case, SCOTUS ruled that mere isolation of DNA was not subject to patent protection (though complementary DNA, which does not naturally occur in nature, may do so).

The use of broad standards on patent procedures may lead to difficult developments in a particular field of research. One consequence of this is that nowadays, in addition to an analysis of the state of the art, whoever wants to file or exploit a patent needs to spend significant resources on freedom to conduct analyses, increasing research and development costs. Further, even those analyses do not guarantee a clear operating path, and the more (broad) patents on a specific field, the higher the litigation risks are. This may act as a disincentive to compete in highly developed IP fields, especially by small businesses which cannot deal with the costs of litigation or related insurances.

The problem of granting too broad monopolies is not privative to patents. In trademarks, allowing registration of a generic or a descriptive sign will prevent competitors from using terms necessary to compete on equal terms.

The main requirement of a trademark is that its signs are distinctive. Trademarks that consist on the same names of the products or services they identify are non-distinctive since they are considered generic. To grant a generic trademark would remove it from the public domain names that remain available to all competitors of a determined good or service.[11]

An example of this can be seen in a Chilean case with reference to the term kanikama. In this case, the trademark "Kanikama" was granted for Class 29 of the Nice Classification, corresponding to food. An action for annulment was filed and succeeded on the basis that "the documents submitted by the applicant, prove without a doubt that the expression kanikama corresponds to the generic name of a food product made from a fish paste called surimi. Indeed, the best-known surimi in the West is kanikamaboko, commonly called kanikama, which has high protein content and, in turn, a very low level of cholesterol and fat. Its name comes from the Japanese language, a country which has achieved success beyond its borders and is commonly used to describe one of the ingredients used in the preparation of the typical food of Japan. Furthermore, that expression has been used in the East long before the application that originated the record which is now void, and that in view of the expansion of Japanese food—today— the kanikama expression is known and commonly

8 Loren and Miller (??: 188).

9 See https://supreme.justia.com/cases/federal/us/447/303/case.html.

10 See http://www.nature.com/nbt/journal/v24/n3/full/nbt0306-317.html#B4.

11 *Zatarain's, Inc. v. Oak Grove Smokehouse, Inc.*, 698 F.2d 786 (5th Cir. 1983).

used in connection with the goods in Class 29 in other countries of the world."[12]

This case illustrates how obtaining a generic trademark is in itself anti-competitive since it prevents other producers of the same product from referring to their products by name. To prevent these restrictions to competition, IP systems should count with appropriate trademarks rules and guidelines to prevent awarding generic trademarks, and also to provide expeditious and effective procedures to request generic trademarks invalidity.

REFUSAL TO DEAL LICENSING AGREEMENTS

Another aspect of interaction between IP and competition is the discussion on extending IPR holders' facility to exclude third parties when this attribution collides with competition. IPRs grant the right to exclude others from using protected inventions without the rights holder's authorization. In consequence, according to this facility, at first sight, a right holder does not have any obligation to license its protected invention.

Notwithstanding this, this absolute view on the extension of IPRs has been diluted by some rulings that have questioned whether competition law may interfere with this exclusive right through granting compulsory licenses to third parties who may need the invention to compete in the relevant market.

The frequency and extension of this intervention will depend on the strength competition law has in each jurisdiction, when balanced with IPR's faculties. This scenario has been seen mainly in the European Union (EU), where Article 102 of the Treaty on the Functioning of the European Union (TFEU) prevents whoever holds a dominant position in a determined market from abusing it. This rule has been interpreted to mean that it establishes a "special responsibility" under which a dominant firm has a duty to give access to its IPR to competitors under some circumstances where not doing so would limit or eliminate competition.

One of the most relevant cases that ruled that the refusal to license IPRs constituted an abuse of dominant position was the *Radio Telefis Eireann & Independent Television Publications Ltd. v. Commission* (Magill) case and the *IMS Health GmbH & Co. OHG v. NDC Health GmbH & Co. KG* (IMS Health) case.

In the Magill case, some TV broadcasters refused to license a copyright-protected program listing information to Magill, a company who wanted to offer a comprehensive TV guide. In the IMS Health case, a health supplies company used regional sales data on pharmaceutical products using a "bricks" structure for different geographical areas. They found that competitors used their copyrighted bricks data structure and asked for an injunction. The sued company, NDC, then filed a complaint based on Article 102 (Article 82 at the time) asking for a compulsory license over this copyrighted structure.

These cases are relevant because they applied the referred duty principle or "special responsibility" even if what was being refused licenses were IPRs. According to these rulings, under some "exceptional circumstances" a refusal to license is abusive if (a) the requested IP is indispensable to compete; (b) the undertaking which requested the license intends to offer products or services not offered by the IP owner and for which there is potential consumer demand; (c) the refusal is such as to reserve to the IP owner a secondary market by eliminating all competition in that market; and (d) the refusal is not justified by objective considerations.[13] In other words, these cases established a test under which refusal to deal may be considered as anti-competitive if it blocks the development of a "new product" from a competitor where there is demand for the product.

This approach was ultimately consolidated and enhanced with the 2007 *Microsoft Corp. v. Commission* case. In the Microsoft case, the EU Commission concluded that Microsoft abused its dominant position in the market for client PC operating systems because it refused to license certain interface information of its working group server (WGS) operating systems to its competitor Sun Microsystems.[14]

Under this decision, the Court of First Instance (CFI) ruled that "the circumstance relating to the appearance of a new product, as envisaged in Magill and IMS Health ... cannot be the only parameter which determines whether a refusal to license an intellectual property right is capable of causing prejudice to consumers within the meaning of Article 102 (b) TFEU[15]" and that there could be abuse of a dominant position if the refusal limits technical developments in general.

In other words, the Commission applied a broader test, the "Incentives Balance Test, under which the potentially abusive effects of a refusal to deal in the relevant market are determined not only regarding the development of a new product but also the possible blocking of innovative conduct in general.

Therefore, a compulsory license may be enforced when the negative effects of a license on the dominant firm's incentives to innovate are prevailed over by the positive effects on the innovative climate in the whole market.[16]

12 Chilean Trademark Guidelines.

13 Ahlborn et al. (2004: 1109).

14 Kerber and Schmidt (2008: 7).

15 Paragraph 647 of the decision.

16 Kerber and Schmidt (2008: 8).

These interpretations make several limitations to IPRs towards strengthening competition and the enforcement of Article 102 TFEU. This may cause some surprise in other jurisdictions where there are no special responsibility approaches and a refusal to license is seen as a legitimate decision from an IP holder, and therefore, unilateral refusal to license cases cut to the heart of the intellectual property owner's right to exclude others from using the intellectual property.[17]

In the US, for example, in general, a firm has no duty to deal with its competitors. In fact, imposing obligations on a firm to do business with its rivals is at odds with other antitrust rules that discourage agreements among competitors that may unreasonably restrict competition. But courts have, in some circumstances, found antitrust liability when a firm with market power refused to do business with a competitor.[18]

PATENT HOLD-UPS ON STANDARD SETTINGS

According to the International Organization for Standardization (ISO), a standard is a document that provides requirements, specifications, guidelines or characteristics that can be used consistently to ensure that materials, products, processes, and services are fit for their purpose.[19]

Standards have acquired increasing importance in many industries, and especially in the innovative ones. The existence of standards promotes the development of compatible or interoperable products by competing firms. In other words, they ensure compatibility between complementary products and even between various parts of a particular product. Product standards are often critical to the effective functioning of markets and play an important role in international trade. For consumers/users, standards provide information and this serves a quality assurance function.[20]

Standard setting may take different forms—technical standards may be the consequence of regulatory intervention, cooperative standards may be established through voluntary standard-setting organizations, or de facto standards set by the market place may emerge following intense competition between firms engaged in a winner-take-all standards war.[21] A cooperative standard is likely to enable multiple firms to be active in the industry, while the development of a de facto standard may lead to a single, proprietary product, controlled by a dominant firm.[22]

Cooperative standards are developed by standard setting organizations (SSO). To do so, disclosure rules require participants to the SSO to inform members of the SSO of any IP rights they hold on technologies; SSOs are also based on transparency rules enabling members to be kept informed of ongoing and finalized standardization work. Licensing rules ensure that all members have effective access to the standard on fair, reasonable and non-discriminatory terms (FRAND).

A patent hold-up occurs when a patent holder takes part in a standard setting process conducted by a SSO to establish an industry standard, and after having had its patent included in the technology standard retained by the SSO, threatens to enforce its standard essential patent (SEP) rights to extract supra-competitive prices from firms producing goods which use the standard.

The hold-up problem typically occurs in two scenarios. First, the patent holder takes part in standardization operations and fails to disclose the existence of a relevant IPR to the SSO, and then once the standard is set, attempts to extract large royalty payments under threat of an injunction (the so-called patent ambush). Second, the patent holder first agrees to have its patent included in the standard retained by the SSO in exchange for a commitment to license its patent under FRAND terms, and then attempts to charge locked-in standard compliant manufacturers much higher rates than FRAND terms.[23]

This issue has increased in relevance over the years, and one of its main concerns involves overlaps between IP and antitrust laws. One of many examples of the complexities that may arise from this issue can be found in the recent European Court of Justice's judgment in Case C-170/*13 Huawei v. ZTE*, delivered on 16 July 2015.

The question in this case was to determine if under any case seeking an injunction based on a SEP constitutes an abuse of dominant position of the patent holder in terms of Article 102 TFEU.

In this case, Huawei Technologies owned a patent that was notified to the corresponding SSO (the European Telecommunications Standards Institute; ETSI) as essential to the "long term evolution" standard. ZTE commercialized products that operated on the basis of the long term evolution standard, thus using Huawei's patents, without paying a royalty to Huawei or exhaustively rendering an account to Huawei Technologies for past acts of use.

17 Hovenkamp (??: 13).

18 Under the "essential facilities" doctrine a monopolist must, under certain circumstances, allow reasonable access to the facilities to its competitors. This doctrine has been very criticized in the US. For details, see Areda (1989).

19 See http://www.iso.org/iso/home/about.htm

20 See http://www.wipo.int/export/sites/www/sme/en/documents/pdf/ip_standards.pdf.

21 According to the Agreement on Technical Barriers to Trade, technical regulations and standards have a different meaning. The first ones refer to obligatory processes and the latter to voluntary ones.

22 Lianos and Dreyfuss (2013: 91).

23 Todino (2014: 29).

Huawei Technologies brought an action for infringement against ZTE before the Regional Court in Düsseldorf, Germany, seeking an injunction prohibiting the infringement, the rendering of accounts, the recall of products, and an award of damages.[24] Huawei Technologies indicated the amount that it considered to be a reasonable royalty. For its part, ZTE Corp. sought a cross-licensing agreement. However, no offer relating to a licensing agreement was finalised.[25] The court requested the European Court of Justice to give a preliminary opinion on whether this action constituted an abuse of dominant position by Huawei.

The European Court of Justice ruled that Article 102 TFEU must be interpreted as meaning that the proprietor of an SEP, which has given an irrevocable undertaking to a standardization body to grant a licence to third parties on FRAND terms, does not abuse its dominant position, within the meaning of Article 102 TFEU, by bringing an action for infringement seeking an injunction prohibiting the infringement of its patent or seeking the recall of products for the manufacture of which that patent has been used. This would be valid as long as

"– prior to bringing that action, the proprietor has, first, alerted the alleged infringer of the infringement complained … and, secondly, after the alleged infringer has expressed its willingness to conclude a licensing agreement on FRAND terms, presented to that infringer a specific, written offer for a licence on such terms, specifying, in particular, the royalty and the way in which it is to be calculated, and

– where the alleged infringer continues to use the patent in question, the alleged infringer has not diligently responded to that offer, in accordance with recognised commercial practices in the field and in good faith, this being … in particular, that there are no delaying tactics."[26]

This judgement states that SEP holders may exercise their IPRs though seeking injunctions over potential infringers, but complying with previous determined approaches to celebrate a FRAND.

This ruling illustrates how IPRs and competition issues intensively overlap in this matter. On one hand, injunction may be understand as a natural and legitimate attribute of IPRs, essential to effective enforcement and therefore fundamental to comply with the benefits that IP offers. On the other hand, injunctions may be used as an anti-competitive tool in the standard-setting scenario, and therefore these attributes should be limited to promote their rational and fair use.

The decision takes into consideration that SEPs have very unique and powerful effects on competition, and they should be subject to special considerations to ensure the commitments patent holders have with SSOs to enter into FRAND terms. This seems an adequate response to the matter. Since the SEP patent holder has an inherent market power, granted in supposed good faith through the standard-setting process, it is natural for courts to promote the reach of FRAND before allowing the patent holder to seek injunctions against their competitors.

HARMONIZING RESPONSES TO THE INTERACTION BETWEEN IP AND COMPETITION

Notwithstanding that both IP and competition serve similar rationales, historically they have had an independent development. As a result, these fields have grown apart in their institutions, legislation, and study. This trend has started to change over recent years since global trade is increasingly developing in ways that bring new challenges to a harmonized interaction of these fields.

One way to illustrate these differences is through looking at their legal development. At a regulatory level, the IP system is characterized by a balance among its standardized evolution through international agreements and the local regulatory differences established in using those agreement's flexibilities. By contrast, the regulation of competition has had a rather local approach, with no major international regulatory standardization.

The first IP international agreement was the Paris Convention for the Protection of Industrial Property, signed in Paris in 1883, which today has 176 contracting members. Also, since 1995, the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) is in force, with 162 World Trade Organization (WTO) members applying it. This is to date the most comprehensive IP agreement. It introduced IP into international trade by regulating global minimum standards for protecting and enforcing nearly all forms of IPRs. Furthermore, after TRIPS several bilateral and plurilateral IP negotiations have taken place, especially through free trade agreements (FTAs), increasing TRIPS standards, which, due

24 Paragraph 21 to 24 of the judgement.

25 Paragraph 25 of the judgement.

26 Paragraph 71 of the judgement.

to the application of the most favoured nation (MFN) clause, are conferred to all WTO members. This resulted in national legislations that have a common basic standard regarding the scope and extension of IP rights. However, national legislations differ on the extension of IP regulation above that minimum.

In opposition, notwithstanding that the WTO agreements, including TRIPS, do contain some provisions dealing with competition, and major efforts were deployed in the WTO Doha Round to agree on minimum international competition standards, ultimately the WTO decided in 2004 that this matter would not be part of the Doha work program. Also, aside from assuring the existence of minimum institutions and enforcement efforts, FTAs have not established large substantive competition obligations.

The international character of IP and the effects it may have in trade must be analyzed taking into account the local characteristics of competition law. The latter allow countries to address related trade challenges in a more flexible manner, according to their own perspectives and policies. In this regard, some attempts at designing the best set of practices on IP and competition policy have progressed through national and plurilateral efforts.

EUROPEAN UNION

The TFEU) provides two legal bases for challenging antitrust acts in Articles 101 and 102.[27] Article 101 prohibits anti-competitive agreements and concerted practices in general terms, and also provides some examples of behaviours that would be considered incompatible with internal market. Article 102 prohibits abusive conducts from actors with dominant position within their market, providing some examples of these behaviours as well.

Regarding the abuse of dominant position, Article 102 has served as a base for some of the most relevant cases in this field, in topics such as refusals to license or standards setting. With regard to this rule, the EC published in 2005 a competition discussion paper on the application of Article 82 EC to exclusionary abuses. After three years of discussion, and also of waiting for the decision of the Court of First Instance in the Microsoft case (one of the most controversial cases regarding the application of Article 102 TFEU—former 82 EC), in 2008, the EU Commission's Directorate General for Competition published the Guidance on the Commission's Enforcement Priorities in Applying Article 82 EC Treaty to Abusive Exclusionary Conduct by Dominant Undertakings.

These provisions are the basis for the interaction between competition and IP laws in the EU. A major milestone in EU competition and IP regulation was the adoption by the European Commission (EC), in 2014, of a revised competition regime for technology transfer agreements.

This regime was adopted because some IP licenses may fall within the scope of Article 101 TFEU. Therefore, parties who want to enter into license agreements are in need to have some certainty on whether they may present problems under this provision.

To simplify this assessment, the commission has defined certain categories of agreements that are unproblematic from a competition point of view, based on its market and case experience. These are set out in various Block Exemption (BE) Regulations. If an agreement fulfils all criteria of a certain BE, it is exempted from prohibition under Article 101 TFEU.[28]

The new BE only provides a safe harbour from competition law challenges to technology transfer licenses between two parties having less than a certain market share—for competing undertakings a combined market share of less than 20 percent of the relevant market and of less than 30 percent each in the case of non-competing undertakings.

The new BE contains a blacklist of "hardcore restrictions" whose presence in a technology transfer agreement excludes it from the safe harbour benefits.

Another relevant milestone of the EC was the publication, in 2011, of new guidelines on the applicability of Article 101 TFEU to horizontal co-operation agreements. They deal with research and development agreements, production agreements including subcontracting and specialization agreements, purchasing agreements, commercialization agreements, standardization agreements, including standard contracts, and information exchange. The purpose of the guidelines is to provide an analytical framework for the most common types of horizontal co-operation agreements, primarily based on legal and economic criteria, which will contribute to their analysis in their legal and economic context on their actual and likely effect on competition.[29]

The guidelines bring special relevance to standardization agreements. They classify these agreements according to their capability to produce restrictive effects on competition, and this is observed in the existence of market power. Under this perspective, the guidelines state that in the absence of market power, a standardization agreement is not capable of producing restrictive effects on competition.[30]

When there is a risk of creating market power, the guidelines also provide a "safe harbour" regarding standardization operations. Under this safe harbour, standard-setting

27 Note that these sections of TFEU were originally Articles 85 and 86 of the Treaty of Rome. Then, the Treaty of Amsterdam renumbered these provisions to Articles 81 and 82. Finally, the TFEU renumbered them to Articles 101 and 102. So the way these sections are referred to may vary.

28 See http://europa.eu/rapid/press-release_MEMO-14-208_en.htm.

29 Paragraphs 4, 5 and 277 of the guidelines.

30 Paragraph 277 of the guidelines.

agreements which risk creating market power would normally fall outside the scope of Article 101(1).

The conditions that standardization operations must comply with to benefit from this safe harbour are unrestricted participation from all competitors in a transparent procedure; no obligation to comply with the standard; and to provide access to the standard on fair, reasonable, and non-discriminatory terms.

If a standardization agreement deviates from the safe harbour principles, there is no presumption of illegality, but parties to the standardization agreement must assess whether the agreement falls under Article 101(1), and if so, if it is justified under Article 101(3). For this self-assessment, the commission provides a number of considerations in line with an effects-based approach.[31]

UNITED STATES

Another example of harmonization between these fields is the joint work that the Federal Trade Commission (FTC) and the Antitrust Division of the Department of Justice (DOJ) of the US have done in this regard, recognizing that promoting consumer welfare is the common ground between the intellectual property and antitrust laws, and efforts to address the intersection between these disciplines should seek to serve this mandate.[32]

Much of what the FTC does today takes place at the intersection of competition policy and IP. This is not a recent development in the agency's experience. Competition policy issues involving the exploitation of IP rights occupied significant FTC resources in the first years of the agency's operations after it opened for business in March 1915. In the nine decades that followed, a striking number of the commission's most significant contributions to competition policy and antitrust enforcement have taken place in matters involving the acquisition or use of IP rights.[33]

The US has been very active in developing different ways to study and spread discussion and analysis of this topic, mainly through the work of the FTC as a competition advocate and expert agency.[34]

One main course of action has been the publication of reports on the matter. In 1995, the FTC and the DOJ (together, the "Agencies") published the Antitrust Guidelines for Licensing of IP: New Signposts for the Intersection of IP and the Antitrust Laws. These guidelines express policy statements on antitrust concerns that may arise in licensing arrangements.[35] They state the policy of the FTC and the DOJ at the time, listing three core principles—(a) for the purpose of antitrust analysis, the Agencies regard intellectual property as being essentially comparable to any other form of property; (b) the Agencies do not presume that intellectual property creates market power in the antitrust context; and (c) the Agencies recognize that intellectual property licensing allows firms to combine complementary factors of production and is generally pro-competitive, stating that the Agencies apply the same general antitrust principles to conduct involving IP that they apply to conduct involving any other form of tangible or intangible property.[36] These principles were set with the purpose of avoiding the consideration of IP as "inherently suspect."[37]

Also, in 2003, the FTC published the To Promote Innovation: the Proper Balance of Competition and Patent Law and Policy report (also known as the Antitrust-IP Guidelines) on the US patent system and the effect of the rights-granting process on competition.[38] The chief basis for the report was an extensive set of hearings conducted by the Agencies in 2002. The FTC's report made recommendations for patent system reform that, among other ends, are designed to ensure that patents granted satisfy existing standards of patentability.[39]

Further, in 2007, the Agencies published the Antitrust Enforcement and IPRs: Promoting Innovation and Competition guidelines, drawn for evaluating certain activities involving IPRs, as well as the key considerations that should inform the Agencies' analysis.[40]

The Agencies have also worked on the matter independently. An example of this is the report Competition and Monopoly: Single-Firm Conduct under Section 2 of the Sherman Act published by the DOJ in 2006. In this report, the DOJ seeks to contribute to the public debate on the standards for analyzing single-firm conducts under Section 2 of the Sherman Act. Though the hearings that preceded this document

31 See http://www.cgsh.com/files/News/b89707fb-a171-4d48-ba71-6514c287a500/Presentation/NewsAttachment/e6f192df-aff0-4b89-a434-6612a3e10f60/CGSH%20Alert%20-%20New%20Guidelines%20on%20Horizontal%20Co-operation%20Agreements.pdf (p. 2).

32 Ohlhausen (2013: 2).

33 Kovacic (2007: 321).

34 Aside from its prosecution role.

35 Available at

36 Available at http://www.justice.gov/sites/default/files/atr/legacy/2006/04/27/0558.pdf.

37 Wright, Joshua (2014: 4).

38 Available at https://www.ftc.gov/sites/default/files/documents/reports/promote-innovation-proper-balance-competition-and-patent-law-and-policy/innovationrpt.pdf.

39 Wright (2014: 328).

40 Antitrust Enforcement and IPRs Guidelines, p. 3.

were organized by the FTC and the DOJ together, the latter published this report independently, generating a debate with statements from FTC commissioners.[41]

Another way the FTC has addressed the relation between IP and competition is through its advocate and expert agency role and different workshops and reports on them. For example, the 2011 FTC report on The Evolving IP Marketplace, Aligning Patent Notice and Remedies With Competition explores issues related to patent hold-up based on input from a 2010 workshop,[42] or the Patent Assertion Entity (PAE) Activities Workshop[43] document, submitted as part of a workshop on PAEs or "patent trolls," which contains insights and contributions on these issues from some of the leading minds in academia and the business world.[44]

Finally, the Agencies have address complex antitrust questions related to conduct involving the exercise of intellectual property rights in enforcement actions, reports, testimony, reviews of proposed business conduct, and amicus curiae or "friend of the court" briefs filed in the federal courts of appeals and the Supreme Court.[45]

OECD

Finally, one relevant case to review of a plurilateral approach to the topic can be found in the work that the Organisation for Economic Co-operation and Development (OECD) has done in the matter.

Through different instances, the OECD has studied several aspects of the interaction between IP and competition, which are a highly valuable resource to understand these problems in a deeper manner.

One of the main instances of debate on this has been the competition best practices roundtables. In 1997, the Competition Policy and Intellectual Property Rights debate took place.[46] Since then, many round tables have analyzed different related topics, such as the 2004 Merger Review in Emerging High Innovation Markets and the "IPR" round tables.[47]

Other round tables have discussed more specific issues such as the 2014 Competition, Intellectual Property and Standard Setting round table,[48] which analyzed the challenges of Information and Communication Technologies (ICT) standards because of their reliance on different patented technologies. Also, the 2006 and 2009, Competition, Patents and Innovation round tables analyzed the influence of competition and patents on innovation, and also some issues that IP may have on competition, such as the uncertainty created by pending patents and how they can be used for strategic purposes, some of which may be harmful to competition and innovation.[49]

CONCLUSIONS AND POLICY RECOMENDATIONS

Competition and intellectual property are in many ways aligned since they share the common ultimate goal of promoting consumer welfare. Nonetheless, in achieving this purpose there are new areas of tension constantly arising between them, especially since innovation plays an increasingly relevant role in world trade.

To properly confront the challenges that this evolution presents, it is very important to analyse the matter actively and in depth. This exercise includes understanding the factors of discussion in both a general and a local manner. To do so, it is relevant to consider that both IP and competition have common grounds of analysis in general, but also local peculiarities in each jurisdiction and region, making their interaction different in each country.

Though in general this area of interaction has not been so vastly explored, this is changing now with different local and regional efforts, such as those pointed out in Section 3. These initiatives constitute an opportunity to develop a discussion that can lead each national system to confront new challenges in this field in a stronger manner.

In this, there is a set of practices that can be recommended for promoting the approach in each country in the long term, based on different observed practices, including those mentioned above.

41 Statement of commissioners Harbour, Leibowitz and Rosch https://www.ftc.gov/sites/default/files/attachments/press-releases/ftc-commissioners-react-department-justice-report-competition-monopoly-single-firm-conduct-under/080908section2stmt.pdf. Statement from Chairman Kovacic: https://www.ftc.gov/sites/default/files/attachments/press-releases/ftc-commissioners-react-department-justice-report-competition-monopoly-single-firm-conduct-under/080908section2stmtkovacic.pdf.

42 Available at https://www.ftc.gov/reports/evolving-ip-marketplace-aligning-patent-notice-remedies-competition.

43 Available at http://www.ftc.gov/opp/workshops/pae/.

44 Ohlhausen (2013: 6).

45 Antitrust Enforcement and IPRs Guidelines, p. 2.

46 Available at http://www.oecd.org/daf/competition/abuse/1920398.pdf.

47 Available at www.oecd.org/dataoecd/40/0/2492253.pdf.

48 Available at http://www.oecd.org/daf/competition/competition-intellectual-property-standard-setting.htm.

49 Available at http://www.oecd.org/daf/competition/39888509.pdf and http://www.oecd.org/daf/competition/45019987.pdf.

A first course of action is to enhance the relation between competition and IP agencies. This may be done at different levels—from bringing IP and competition promotion functions into a single office, to promoting an informal more fluent relation among offices.

A highlight in this regard is the Peruvian case, where the promotion of IP, competition, and consumer protection is conducted by a single agency. The country's Instituto Nacional de Defensa de la Competencia y de la Protección de la Propiedad Intelectual (National Institute for the Defence of Competition and Protection of Intellectual Property; INDECOPI) is a specialized public agency whose functions are the market promotion and protection of consumers' rights. In addition, it promotes fair and honest competition in the Peruvian economy, safeguarding all forms of IP—from trademarks and copyrights to patents and biotechnology. This structure allows Peru to develop joint initiatives fluently, and to analyze their consumer´s welfare system with a systemic approach. Colombia follows a similar approach with a single agency for the same three areas.

An easier way to promote the relation between IP and competition governmental functions is through entering into memorandums of understanding with agencies to formally promote different activities to enhance IP and competition analysis. Some examples can be found in Canada[50] and Chile.[51] Subscribing to these agreements is relevant to formalizing and providing stronger political relevance to the development of joint initiatives among IP and competition agencies in the long term.

Moreover, offices may develop an informal relation as well. The bottomline is that IP and competition institutions should work closer each day, acknowledging the complementarities of each other's system and the challenges they both address.
A second policy priority recommendation is to develop long-term initiatives of analysis of the joint challenges of IP and competition, disregarding the form that IP and competition institutions relations may take.

Some examples of initiatives that may be developed are regular workshops and other diffusion exercises among IP and competition public servants, academics, attorneys and other relevant stakeholders; the establishment of consultation channels between agencies; and the setting up of a regular calendar of authorities meetings to discuss joint agendas and concerns, among others. The World Intellectual Property Organization (WIPO) has promoted and organized such activities.[52]

Another initiative to consider is the publication of joint opinions where applicable, for instance, in high-profile cases where IP and competition topics arise and there is a consensus on how to address them. These kinds of actions may show in a specific manner how IP and competition agencies may join hands and how their topics can in many cases be aligned.

Further, a fundamental initiative in this regard is the development of joint studies among agencies. This initiative is vastly recommended to enhance IP and competition interaction to address considering all relevant angles in a determined matter.

A third recommended line of action in the relation between agencies, in the long term, may be the publication of different type of soft law instruments that address these topics. This includes publishing joint guidelines and also memos from each authority.

Finally, it may also be desirable that the relation between IP and competition be taken to the next level by formally considering the impact that IP norm setting may have on competition.

This effort is highly relevant for the purpose of raising a strong and deep ex-ante position of the IP and competition national system that would allow stakeholders to address future challenges in a coherent manner.

To sum up, the recommendation is to develop a strong and permanent relation and joint instruments among IP and competition authorities in each country, and to strengthen the understanding of each national reality to face future challenges in a more comprehensive and, if possible, aligned manner. To enhance the analysis of competition and IP interaction on each nation, it is important to understand the uniqueness of their systems and, as a consequence, address interaction challenges in the best mode that protects and promotes their development.

---

50 MoU available at http://www.competitionbureau.gc.ca/eic/site/cb-bc.nsf/vwapj/CB-CIPO-MOU-140402-e.pdf/$file/CB-CIPO-MOU-140402-e.pdf.

51 MoU available at: http://www.inapi.cl/portal/institucional/600/articles-1956_recurso_1.pdf

52 See http://www.wipo.int/ip-competition/en/.

REFERENCES

Ahlborn, C., Evans, D. and Padilla, J. 2004. "The Logic and Limits of the 'Exceptional Circumstances Test' in Magill and IMS Health." *Fordham International Law Journal*, Vol. 28, No. 4.

Areda, Phillip. 1989. "Essential Facilities: An Epithet in Need of Limiting Principles." In *Antitrust Law Journal*, Vol. 58, No. 3, Developments, pp. 841–53, http://www.jstor.org/stable/40843140?seq=1#page_scan_tab_contents.

Cornish, W. R. Llewelyn, David and Aplin, Tanya Frances. 2010. *Intellectual Property: Patents, Copyright, Trademarks and Allied Rights.* Sweet and Maxwell, London, 7th ed.

Hovenkamp, Herbert J., Janis, Mark D. and Lemley, Mark A. 2005. "Unilateral Refusals to License in the US." April, Stanford Law and Economics Olin Working Paper No. 303, http://ssrn.com/abstract=703161.

Kerber, Wolfgang and Schmidt, Claudia. 2008, "Microsoft, Refusal to License Intellectual Property Rights, and the Incentives Balance Test of the EU Commission." http://ssrn.com/abstract=1297939.

Kovacic, William E. 2007. "The Importance of History to the Design of Competition Policy Strategy: The Federal Trade Commission and Intellectual Property." Symposium: At the Intersection of Antitrust and Intellectual Property Law: Looking Both Ways To Avoid A Collision, *Seattle University Law Review*, Vol. 30.

Lianos, Ioannis and Dreyfuss, Rochelle C. "New Challenges in the Intersection of Intellectual Property Rights with Competition Law — A View from Europe and the United States." CLES Working Paper Series.

Loren, Lydia and Miller, Joseph. 2012. "Intellectual Property Law: Cases and Materials." Ver. 3.0, Semaphore Press.

Ohlhausen, Maureen K. 2013. "A Pragmatist's Approach to Navigating the Intersection of IP and Antitrust." 2013 Standards and Patents Conference, London, 4 Dec., https://www.ftc.gov/sites/default/files/documents/public_statements/pragmatists-approach-navigating-intersection-ip-antitrust/131204ukantitrust.pdf.

Pitofsky, Robert. 2001. "Antitrust and Intellectual Property: Unresolved Issues at the Heart of the New Economy." 16 Berkeley Tech. L.J.

Stiglitz, Joseph E. 2008. "Economic Foundations of Intellectual Property Rights." *Duke Law Journal*, Vol. 57.

Todino, Mario. 2014. "Antitrust Rules and Intellectual Property Rights in the EU and the US – Towards Convergence?." *Italian Antitrust Review*, No. 2.

Wright, Joshua. 2014. "Does the FTC Have a New IP Agenda?." 2014 Milton Handler Lecture: "Antitrust in the 21st Century." New York City Bar Association, New York, 11 March 11, https://www.ftc.gov/system/files/documents/public_statements/288861/140311ipagenda.pdf.

Guidelines and other policy documents

European Commission Guidelines on the Applicability of Article 101 of the Treaty on the Functioning of the European Union to Horizontal Co-operation Agreements. http://ec.europa.eu/competition/consultations/2010_horizontals/guidelines_en.pdf.

European Commission Guidelines on the Application of Article 81 of the EC Treaty to Technology Transfer Agreements. http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52004XC0427(01)&from=EN.

Antitrust Guidelines for the Licensing of Intellectual Property. Issued by the US Department of Justice and the Federal Trade Commission, 6 April 1995. http://www.justice.gov/sites/default/files/atr/legacy/2006/04/27/0558.pdf.

Antitrust Enforcement and IPR's: Promoting Innovation and Competition. Issued by the US Department of Justice and the Federal Trade Commission, April 2007. https://www.ftc.gov/sites/default/files/documents/reports/antitrust-enforcement-and-intellectual-property-rights-promoting-innovation-and-competition-report.s.department-justice-and-federal-trade-commission/p040101promotinginnovationandcompetitionrpt0704.pdf.

Competition and Monopoly: Single-Firm Conduct under Section 2 of the Sherman Act US Department of Justice, 2008. http://www.justice.gov/atr/competition-and-monopoly-single-firm-conduct-under-section-2-sherman-act.

To Promote Innovation: The Proper Balance of Competition and Patent Law and Policy A Report by the Federal Trade Commission, Oct. 2003. https://www.ftc.gov/sites/default/files/documents/reports/promote-innovation-proper-balance-competition-and-patent-law-and-policy/innovationrpt.pdf.

The Evolving IP Marketplace: Aligning Patent Notice and Remedies with Competition. A Report of the Federal Trade Commission. https://www.ftc.gov/reports/evolving-ip-marketplace-aligning-patent-notice-remedies-competition.

OECD Policy Roundtables. Competition Policy and Intellectual Property Rights, 1997. http://www.oecd.org/daf/competition/abuse/1920398.pdf.

OECD Policy Roundtables . Competition, Intellectual Property and Standard Setting, 2014. http://www.oecd.org/daf/competition/competition-intellectual-property-standard-setting.htm#docs.

OECD Policy Roundtables. Competition, Patents and Innovation. http://www.oecd.org/daf/competition/39888509.pdf and http://www.oecd.org/daf/competition/45019987.pdf.
Chilean Trademark Guidelines, 2010. http://www.inapi.cl/portal/publicaciones/608/articles-752_recurso_1.pdf.

Memorandums of Understanding

Canada: http://www.competitionbureau.gc.ca/eic/site/cb-bc.nsf/vwapj/CB-CIPO-MOU-140402-e.pdf/$file/CB-CIPO-MOU-140402-e.pdf.

Chile: http://www.inapi.cl/portal/institucional/600/articles-1956_recurso_1.pdf.

Judgements

Atari Games Corp. v. Nintendo of America, Inc., 897 F.2d 1572, 1576 (Fed. Cir. 1990).

Zatarain's, Inc. v. Oak Grove Smokehouse, Inc., 698 F.2d 786 (5th Cir. 1983).

Diamond v. Chakrabarty, 447 US 303 (1980).

Brenner v. Manson, 383 US 519 (1966).

Molecular Pathology v. Myriad Genetics, Inc., 133 S. Ct. 2107 (2013).

IMS Health GmbH & Co. OHG v. NDC Health GmbH & Co. KG. Case C-418/01.

Radio Telefis Eireann (RTE) and Independent Television Publications Ltd (ITP) v Commission of the European Communities. Joined cases C-241/91 P and C-242/91 P.

Microsoft Corp. v Commission of the European Communities. Case T-201/04.

Huawei v. ZTE. Case C 170/13.

Implemented jointly by ICTSD and the World Economic Forum, the E15Initiative convenes world-class experts and institutions to generate strategic analysis and recommendations for government, business, and civil society geared towards strengthening the global trade and investment system for sustainable development.

ICTSD

International Centre for Trade and Sustainable Development

WORLD ECONOMIC FORUM

COMMITTED TO IMPROVING THE STATE OF THE WORLD