patent protection, as considered, typically allows the entrance of independent and innovative substitute products into the market - in some particular circumstances, it may occur that the market power enjoyed by IP holders reaches unintended dimensions, resulting in an actual foreclosure of third party competition, thus leading to a "de facto" monopoly. In other words, depending on the availability of substitute technologies on the relevant market, exclusive rights may ultimately lead to market power and even monopoly as defined under competition law. In such a scenario, expected business dynamics is endangered⁷⁸ and the delicate balance between competition and IP law shall be accordingly re-adjusted, eventually by carefully delineating the specific circumstances in which antitrust remedies should intervene to correct the unwanted impasse that occurs when, for the concurrence of encountered factual and economic circumstances, patent protection grows beyond its foreseen conventional scope.⁷⁹

II. Matured View of Complementarity between IP Protection and Competition

Here, the question to be dealt with is whether an intervention of antitrust law to correct a patent misuse may be pertinent and, eventually, desirable.⁸⁰ Concerns stem from the debated "intersection" between intellectual property and competition law, with their deriving conflicts, traditionally rooted in the seeming antinomy of the respective direct goals of the named disciplines: promoting innovation through the attribution of exclusive rights, on the one hand, and preserving open access to the market, on the other hand.⁸¹ However, we may be merely confronted with an apparent source of conflict, because at the highest level of analysis, IP and competition law may well serve "complementary" scopes,⁸² as they both ultimately aim at promoting consumer welfare and, in different ways, innovation.

- 78 For a broader, critical approach on the issue, see i.a.: Ghidini G., "Patent Protection of Innovations: A Monopoly with a Wealth of Antibodies", In: "Intellectual Property and Competition Law: The Innovation Nexus", Edward Elgar Publishing, 2006, p. 13 et seq.
- 79 Along the same line: Ghidini G., "Exclusive Protection and Competitive Dynamics of Innovation: Striking a Balance", *supra*, fn. 78, p. 23 *et seq*.
- 80 For a thorough review on the matter, see: Ullrich H., "The Interaction between Competition Law and Intellectual Property Law: an Overview", European University Institute - Robert Schuman Centre for Advanced Studies, EU Competition Law and Policy Workshop, 2005, Introduction, p. 1 et seq., available at:

http://www.iue.it/RSCAS/Research/Competition/2005/200612-CompUllrichOVERVIEW.pdf

- 81 Ghidini G., "On the Intersection of IPRs and Competition Law with Regard to Information Technology Markets", European University Institute - Robert Schuman Centre for Advanced Studies, EU Competition Law and Policy Workshop, 2005, Introduction, p. 1, available at: http://www.iue.it/RSCAS/Research/Competition/2005/200510-CompGhidini.pdf
- 82 Lowe P., "Intellectual Property: How Special Is It for the Purposes of Competition Law Enforcement?", European University Institute - Robert Schuman Centre for Advanced Studies,

Specifically, on the one hand, competition policy tends to fulfil the named goals by preserving market access, as a driving condition for an efficient and dynamic economy, where suppliers offering the best price-quality conditions would eventually flourish. On the other hand, IP law tends to foster scientific progress for the ultimate benefit of consumers by offering an adequate reward for the innovator, thus nurturing his motivation to invest in new technological solutions, while attempting to strike the right balance between over- and under-protection of inventive endeavours, being the exclusivity conferred upon the right holder limited in scope and in time in order not to undermine follow-on innovation or leading to unnecessarily long periods of high prices for consumers, i.e. longer than required to elicit the innovative effort.

Therefore, by calibrating the means at their disposal and through a profitable dialectical exchange, both IP and competition law share the same long-term objectives in promoting innovation for the benefit of the public at large. It should consequently be up to the legislator to revamp the boundaries between these two interacting disciplines by carefully considering their evolving, but nevertheless interdependent dynamics.⁸³ Nowadays, accordingly, a more mature view has evolved around the belief that intellectual property rights and antitrust law do not have "antagonist", but "complementary" roles.⁸⁴ As highlighted, both systems of law "are aimed at encouraging innovation, industry and competition".⁸⁵ Indeed, as argued further, competition, along with IP protection, should be merely one of the "means" to foster production and distribution of goods and, ultimately, to promote innovation and consumer welfare, these latter being the real "goals" to be attained.

Nevertheless, the need to resort to antitrust law might in many cases be avoided at the source, thereby significantly reducing the costs of litigation, should the IP paradigm truly be structured and consequently applied, so as to trace the right balance and reconcile the conflicting interests of the first and subsequent innovators, who are often rivals in the marketplace. Unfortunately, this does not seem to be regularly the case, since, quoting a straightforward statement, "because legislators often fail to properly define the limits of exclusive property rights, the exercise of those rights in

EU Competition Law and Policy Workshop, 2005, Introduction, p. 1, available at: http://www.iue.it/RSCAS/Research/Competition/2005/200510-CompLowe.pdf

- 83 For the heated discussion over the interplay between intellectual property and antitrust law, see in particular: Arezzo E., "Competition Policy and IPRs: an Open Debate Over an Ever Green Issue", Diritto d'Autore, 2004, vol. 3, p. 81 *et seq.*; Pitofsky R., "Antitrust and Intellectual Property: Unresolved Issues at the Heart of the New Economy", Berkeley Technology Law Journal, 2001, p. 535 *et seq.*
- 84 Hewitt P., "Antitrust and Intellectual Property, Before the American Intellectual Property Association", Mid-Winter Institute, Jan. 2003, available at: http://www.usdoj.gov/atr/public/speeches/200701.pdf
- 85 US Federal Trade Commission, "To Promote Innovation: the Proper Balance of Competition and Patent Law", Report, October 2003, Executive Summary, p. 2, available at: http://www.ftc.gov/os/2003/10/innovationrpt.pdf

new situations, and especially with regard to new technologies, attracts scrutiny under competition law, with a view to preventing market foreclosure".⁸⁶

Indeed, it could be argued that if IP protection always managed to strike the right balance between the conflicting interests at stake, there would be less need for competition law to intervene. In fact, whether IP law does actually hit the perfect equilibrium between over- and under-protection of innovative endeavours and whether, and under which circumstances, competition policy should intercede in this delicate domain are complex questions that ought to be properly addressed.

1. Stance of the US Antitrust Authorities

In the United States, the Federal Trade Commission (FTC) confronted in an official report,⁸⁷ released in October 2003, the issue of the complementary role of competition and patent law in promoting innovation.⁸⁸ Following the wording of the Commission, "Innovation benefits consumers through the development of new and improved goods, services, and processes. An economy's capacity for invention and innovation helps drive its economic growth and the degree to which standards of living increase. Technological breakthroughs such as automobiles, airplanes, the personal computer, the Internet, television, telephones, and modern pharmaceuticals illustrate the power of innovation to increase prosperity and improve the quality of our lives. Competition and patents stand out among the federal policies that influence innovation. Both competition and patent policy can foster innovation, but each requires a proper balance with the other to do so. Errors or systematic biases in how one policy's rules are interpreted and applied can harm the other policy's effectiveness".

On the one hand, the report continues, "American antitrust law, as codified in the Sherman Act, the Federal Trade Commission Act, and other statutes, seeks "to maximize consumer welfare by encouraging firms to behave competitively [...] Competition can stimulate innovation. Competition among firms can spur the invention of new or better products or more efficient processes. Firms may race to be the first to market an innovative technology. Companies may invent lower cost manufacturing processes, thereby increasing their profits and enhancing their ability to compete. Competition can prompt firms to identify consumers' unmet needs and develop new products or services to satisfy them".⁸⁹

86 Ullrich H., "Expansionist Intellectual Property Protection and Reductionist Competition Rules: A TRIP Perspective", Journal of International Economic Law, 2004, vol. 7, p. 401.

⁸⁷ US Federal Trade Commission, *supra*, fn. 85, p. 1 *et seq*.

⁸⁸ Ferguson R., "Patent Policy in a Broader Context", Remarks - Financial Markets Conference of the Federal Reserve Bank of Atlanta, April 2003, available at:

http://www.federalreserve.gov/boarddocs/speeches/2003/20030407/default.htm

US Federal Trade Commission, *supra*, fn. 85, p. 1.

On the other hand, the same report properly acknowledges that patent policy also stimulates innovation, since it confers an exclusive right that can enable firms to increase their expected profits from investment in research and development, thus fostering innovation that would not occur if not because of the prospect of a patent. Besides, since the patent system requires public disclosure, it can promote the dissemination of scientific and technical information for the public benefit. Accordingly, the US Constitution authorizes Congress "to promote the Progress of Science and useful Arts, by securing for limited Times to [...] Inventors the exclusive Right to their respective [...] Discoveries".⁹⁰

The same conciliatory, matured trend between IP and antitrust was also confirmed more recently: in April 2007, the US Federal Trade Commission (FTC), jointly with the Department of Justice (DOJ), again issued a report dedicated to "Antitrust Enforcement and Intellectual Property Rights: Promoting Innovation and Competition"91 in order to exhaustively illustrate the federal agencies' competition views with respect to a wide range of questions involving intellectual property licensing, including patent pooling⁹² and collaborative standard setting.⁹³ The report follows a series of hearings, started in cooperation by the named agencies in 2002, entitled "Competition and Intellectual Property Law and Policy in the Knowledge Based Economy".⁹⁴ The overall aim was to tackle the complex issues arising when antitrust laws are applied to IP, typically in a setting where business practices are rapidly evolving, on the premises that both antitrust and intellectual property law share the common goal of promoting innovation, with ultimate benefits for consumers.⁹⁵ In fact, the report recognises that "patent pools can help solve the problems created by these overlapping patent rights, or patent thicket, by reducing transaction costs for licensees while preserving the financial incentives for inventors to commercialise their existing innovations and undertake new, potentially patentable research and development".96

Accordingly, the principles adopted for the assessment of intellectual property practices are pragmatically oriented both at preserving competition and at maintaining incentives for creativity and innovation, adopting a flexible "rule of reason" ap-

90 US Constitution, para. I, Sect. 8.

91 US Federal Trade Commission and Department of Justice, "Antitrust Enforcement and Intellectual Property Rights: Promoting Innovation and Competition", Joint Report, April 2007, also available at: http://www.ftc.gov/reports/innovation/ P040101PromotingInnovationandCompetitionrpt0704.pdf

- 92 Id., "Chapter 3: Antitrust Analysis of Portfolio Cross-Licensing Agreements and Patent Pools", Joint Report, April 2007, p. 57 et seq.
- 93 Id., "Chapter 2: Competition Concerns when Patents are Incorporated into Collaborative Set Standards", Joint Report, April 2007, p. 33 *et seq.*
- 94 For more details, see: http://www.ftc.gov/opp/intellect/index.shtm
- 95 Press Release, "Federal Trade Commission and Department of Justice Issue Report on Antitrust and Intellectual Property", April 2007, available at: http://www.ftc.gov/opa/2007/04/ipreport.shtm
- 96 US Federal Trade Commission and Department of Justice, *supra*, fn. 91, p. 57.

proach, which weighs the efficiencies and anti-competitive effects of a particular activity, considering the concrete circumstances of the case under consideration, ultimately providing a certain degree of legal certainty and business predictability. More specifically, with respect to cross-licensing and patent pools, express reference is made to the Antitrust Guidelines for the Licensing of Intellectual Property (US Antitrust - IP Guidelines),⁹⁷ issued in 1995, which share the same general flexible view re-proposed by the report, while then providing a more comprehensive framework for the evaluation of said licensing practices.

2. European Commission's Corresponding Position

Correspondingly, the European Commission has also expressed a conformed view on the complementary role of intellectual property rights and competition law.⁹⁸ Indeed, being aware of the strategic impact of the discussed issues, the Commission launched a public consultation on how future patent policy action to create a EU-wide system of protection can be committed to boost the competitiveness of EU industry, in an attempt to improve the framework conditions in which its business operates⁹⁹ and in order to make the patent system itself "effective and credible within society".¹⁰⁰

On the same premises, with particular reference to technology transfer agreements, the Commission has adopted some rules for applying competition policy to the licensing of patents, know-how and software copyrights, as encompassed by the new Block Exemption Regulation on the application of Art. 81(3) of the EC Treaty to categories of technology transfer agreements and accompanying Guidelines.¹⁰¹

- 97 US Federal Trade Commission and Department of Justice, "Antitrust Guidelines for the Licensing of Intellectual Property", April 1995, available at: www.usdoj.gov/atr/public/guidelines/ipguide.htm
- 98 The progressive proximity gained by EU and US competition law systems has been extensively analyzed, i.a. by: Clifford A., "Foundations of Competition Policy in the EU and USA: Conflict, Convergence and Beyond", In: Ullrich H., "The Evolution of European Competition Law: whose regulation, which competition?", ASCOLA Workshop on Comparative Competition Law, Edward Elgar Publishing, 2006, p. 17 et seq.
- 99 For further details about the European Commission's consultation process, whose closing date for submissions was finally set for the end of March 2006, see: http://europa.eu.int/rapid/pressReleasesAction.do?reference=IP/06/38&format=HTML&aged =0&language=EN&guiLanguage=en
- 100 European Commission, Directorate General for Internal Market and Services, "Questionnaire on the Patent System in Europe", January 2006, p. 3 *et seq.*, available at: http://europa.eu.int/comm/internal market/indprop/docs/patent/consult en.pdf
- 101 Commission Notice Guidelines on the Application of Article 81 of the EC Treaty to Technology Transfer Agreements, O.J. C 101, 27 April 2004, para.7., p. 2 *et seq.*, available at:

In the specific, it is expressly made clear that "The fact that intellectual property laws grant exclusive rights of exploitation does not imply that intellectual property rights are immune to competition law intervention. [...] Nor does it imply that there is an inherent conflict between intellectual property rights and the community competition rules. Indeed, both bodies of law share the same basic objective of promoting consumer welfare and an efficient allocation of resources. Innovation constitutes an essential and dynamic component of an open and competitive market economy. Intellectual property rights promote dynamic competition by encouraging undertakings to invest in the development of new or improved products and processes. So does competition, by putting pressure on undertakings to innovate. Therefore, both intellectual property rights and competition are necessary to promote innovation and ensure a competitive exploitation thereof".¹⁰²

Besides, with reference to the assessment of licensing agreements under Article 81 of the EC Treaty,¹⁰³ it is further stated that "there is no presumption that intellectual property rights and licence agreements as such give rise to competition concerns. Most licence agreements do not restrict competition and create procompetitive efficiencies. Indeed, licensing as such is pro-competitive as it leads to dissemination of technology and promotes innovation".

It is therefore acknowledged that licensing agreements might certainly bear procompetitive advantages by contributing to the dissemination of new technologies.¹⁰⁴ Indeed, this may happen not only through the disclosure of the invention through the patent office, but also through third parties' transactions.

Ultimately, technology transfers, by way of licensing, facilitate an efficient integration of complementary assets, as the individual patent holder is not necessarily at the same time the best-placed producer. In this respect, licensing helps generating incremental innovation not only by avoiding duplication of research and development, but also by allowing a more strategic allocation of resources in the market.

3. WTO's TRIPS Acknowledgement of IP as a "Good of Trade"

Ultimately, the Agreement on Trade-related Aspects of Intellectual Property Rights (hereinafter TRIPs), being aware of the existing interface between competi-

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104 Lowe P., "Intellectual Property: How Special Is It for the Purposes of Competition Law Enforcement?", European University Institute - Robert Schuman Centre for Advanced Studies, EU Competition Law and Policy Workshop, 2005, Introduction, p. 8, available at: http://www.iue.it/RSCAS/Research/Competition/2005/200510-CompLowe.pdf

¹⁰² *Id.*, para. 7.

¹⁰³ Id., para.9.

tion policy and intellectual property,¹⁰⁵ specifies standards concerning the availability, scope and use of intellectual property rights, within the legal framework of the Agreement Establishing the World Trade Organization (WTO),¹⁰⁶ thus implicitly recognizing IP as a "good of trade".¹⁰⁷

Indeed, Art. 27 obliges TRIPs members in principle to grant patent protection to inventions in all fields of technology, meaning that for the first time in the history of industrial property innovations, i.e., immaterial creations, will receive extraterritorial treatment similar to that accorded to other objects of commercial exchange on a wider global scale.¹⁰⁸ In fact, even if the TRIPs contains only rather rudimentary provisions on competition policy, they are quite significant for the essence of its relation to intellectual property.¹⁰⁹

In general, the objectives and guiding motives of TRIPs are given a somehow more concrete expression in Art. 7, according to which "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 conclusive to social and economic welfare, and to a balance of rights and obligations". Furthermore, Art. 8(2) recognizes that appropriate measures may be needed to prevent the abuse of intellectual property.

Besides, Art. 40(1) acknowledges that licensing practices, which restrain competition may have adverse effects on trade or may impede technology transfer and therefore innovation. Following Art. 40(2), member states may adopt measures against licensing practices that have anticompetitive effects and constitute abuses of intellectual property rights.

- 105 Mackenrodt M., "Trade, Intellectual Property and Competition 1. The Interface of Competition Policy and Intellectual Property in the WTO", IIC, 2005, vol. 36, p. 124 et seq. For a thorough analysis on the issue, see in particular: Straus J., "Implications of the TRIPs Agreement in the Field of Patent Law", In: Beier F.-K., Schricker G. (Ed.), "From GATT to TRIPs", IIC Studies, vol. 18, Weinheim, 1996, p. 160 et seq.; Ullrich H., "Technology Protection According to TRIPs: Principles and Problems", In: Beier F.-K., Schricker G. (Ed.), "From GATT to TRIPs", IIC Studies, vol. 18, Weinheim, 1996, p. 357 et seq.
- 106 The WTO is the Agreement establishing the World Trade Organization, adopted at Marrakech in April 1994 (WTO). One of the multilateral agreements signed within the institutional and legal framework provided by the WTO is the Agreement on Trade-related Aspects of Intellectual Property Rights (hereinafter TRIPs), which constitutes the Annex 1 C of the WTO. Within Part. II of TRIPs, on the "Standards Concerning the Availability, Scope and Use of Intellectual Property Rights", Section 5 is dedicated to "Patents". A full version of the TRIPS is available at: http://www.wto.org/english/tratop e/trips e/t_agm0 e.htm
- 107 For a comprehensive legal study on how the international protection of IP rights has been influenced in combination with the international free trade system established through the TRIPS-agreement, see: Beier F.-K. and Schricker G., "From GATT to TRIPs: The Agreement on Trade-related Aspects of Intellectual Property Rights", IIC Studies, vol. 18, Weinheim, 1996.
- 108 As incisively observed by: Straus J., supra, fn. 105, p. 180-181.
- 109 Along the same line, see i.a.: Anderman S., "The Interface Between Intellectual Property Rights and Competition Policy", Cambridge University Press, 2007, p. 7.

The TRIPs provisions, however, do not provide more specific conditions and criteria under which the relevant licensing practices should be evaluated and, therefore, they do not offer any guidance in assessing more complex competition policy issues arising with respect to specific IP licensing strategies.¹¹⁰

¹¹⁰ For a critical overview on the issue, see: Ullrich H., "Expansionist Intellectual Property Protection and Reductionist Competition Rules: A TRIP Perspective", Journal of International Economic Law, 2004, 7, p. 401 et seq.