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Refusal-to-Deal Cases of IP Rights in the Aftermarket of US and EU Law: Convergence of Both Law Systems through Speaking the Same Language of Law and Economics

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ABSTRACT

One of the most common ways in which abuse of dominance cases could lead to action restricting Intellectual Property (IP) law is where an IP right holder's refusal to deal inordinately restricts the development of competition. According to Article 82 of the European Community ("EC Article 82") and Section 2 of the Sherman Act, both US and EU law intervene with regard to de facto monopolies in refusal-to-deal cases based on an exclusive IP right "under exceptional circumstances." The courts however, on both sides of the Atlantic, have not used a common language despite facing the same legal problem while handling it with basically the same principles. Moreover, neither the US nor the EU uses any economic argument at all. This article proposes a common language that could be applied by the courts on both sides of the Atlantic in refusal-to-deal cases. The proposed common language consists of commonly understood legal terms and commonly accepted economic analysis, comprising two cumulative steps: First the courts should examine if there is the "possibility of competition by substitution" and a "de facto monopoly on the downstream market." These two legal terms should be the first two criteria for the finding of an anti-competitive abuse of IP rights. The second step of the proposed analysis would consist of an economic balancing between the pro- and anti-competitive effects of the refusal of the IP owner to deal. This convergence would bring some legal certainty to this area of law, especially through the application of the two-step-test proposed here. Moreover, it would be-

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come an example for the resolution of refusal-to-deal cases at the interface of IP and competition law for other developing countries.

I. Introduction

The prevailing view today is that antitrust, by protecting competition, and intellectual property, by rewarding innovation, create incentives to introduce new products. At the highest level of analysis, intellectual property rights (IPR)\(^1\) and competition policies are complementary because they share a common concern to promote technical progress to the ultimate benefit of consumers (theory of complementarity).\(^2\) Under the theory of complementarity, the intervention of competition laws apparently has to depend on the effects of a given IP right and its exercise on the market. The IP system rests on the idea of long-term innovation incentives. This is entirely consistent with antitrust policy related to exclusionary conduct, which also focuses on dynamic competition and long-term effects. Firms are more likely to innovate if they are at least somewhat protected against free-riding. They are also more likely to innovate if they face strong competition. The right holder is enabled to prevent competitors from exploiting the very subject matter of protection, but may not prohibit the development and use of competing technology. Thus, IPRs exclude only competition by imitation, but further competition by substitution.\(^3\).

One of the most common ways in which abuse of dominance cases could lead to action restricting IP law is where an IP right holder’s

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1. The present thesis focuses mainly on the exclusive rights of copyright and patent law with regard to Intellectual Property rights, but does not focus on trademark rights.
2. See Atari Games Corp. v. Nintendo of Am., Inc., 897 F.2d 1572, 1576 (1990) ("[T]he two bodies of law are actually complementary, as both are aimed at encouraging innovation, industry and competition"). The Technology Guidelines recognize that generally intellectual property and competition law are not in conflict; on the contrary: [B]oth 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 developing new or improved products and processes. So does competition by putting pressure on undertakings to innovate. Therefore, both intellectual property rights and competition law are not in conflict; on the contrary:
refusal to deal inordinately restricts the development of competition. First, there is a general category of dominance which applies to undertakings of a firm in a powerful market position in which some effective competition continues to exist. Second, there is a special extreme form of dominance, a *de facto* monopoly, where the competitor has no ability to compete. However, even when an IP protected product reaches the status of a *de facto* monopoly and falls within the scope of EC Article 82 or Section 2 of the Sherman Act, the mere achievement of that status is not itself viewed as abusive. A firm that has achieved *de facto* monopoly status by virtue of its investment in R&D and IP protection is normally entitled to continue to compete by exercising its exclusionary rights even in aftermarket.”

However, there are cases where the abuse of a dominant position in the upstream market that is being facilitated by the IP right can be “transferred” to the neighboring downstream market: when the competition is eliminated in the downstream market because of the refusal of the IP right holder to license it to competitors. European law has always started from the assumption that the leveraging of dominant positions into other markets may constitute an abuse if success in the neighboring market is not based on competition on the merits. Conduct can be abusive if it is characterized by an instrumental use of the economic power bestowed by the dominant position to gain commercial advantages, which is usually in adjacent markets. Abuses in this category can also be referred to as market power leveraging abuses.

The two most important variants are tying and refusals to grant access to a necessary input for downstream activities.

According to EC Article 82 and Section 2 of the Sherman Act, both U.S. and EU law intervene with regard to a *de facto* monopoly in refusal-to-deal cases based on an exclusive IP right “under exceptional circumstances.” However, the courts on both sides of the Atlantic

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have not, until now, used a common language, despite facing the same legal problem and handling it with basically the same principles (e.g. they do not presume market power from IP rights as such). Moreover, they do not use any economic arguments at all, although the US law facilitates an economic efficiency test and the EU law intends to adopt an economic approach for the application of Art. 82 EC (Part V.B.).

This article points out the common legal approaches of the US and EU law systems, handling refusal to deal cases with regard to IP rights. Part II analyzes the presumption of market power from IP rights as such. It then reveals how the US and EU courts have approached the "exceptional circumstances" criteria for the abuse of IP rights in monopoly situation cases (Part III and IV). Part V ascertains that the US and EU courts do not use economic arguments at all (V.D.) and dictates the possibility of using common legal terms (V. C, D, E, and F) for the definition of "exceptional circumstances" and the resolution of such cases, which are understandable from both sides (V.G.).

II. IP RIGHTS AND THE PRESUMPTION OF MARKET POWER THEREOF

A. General Rule

Market power is the ability of a single seller to raise price and restrict output. Market power is typically associated with a departure from the conditions necessary for the optional functioning of a market: a sufficient number of buyers or sellers, relatively easy conditions of entry and exit, or readily accessible information on market conditions. Intellectual property law potentially confers market power because it creates barriers to competitors' entry into the relevant market with the same good, and to a certain extent, with substitute goods. The degree of market power is a function not only of how unique or socially desirable the product is, but also of how effective the property right is in erecting entry barriers that keep substitutes out of the market. Antitrust is not opposed to market power, as such, if it is necessary to achieve efficiencies and respects the need for incentives for investment in research and development. If a firm builds market power through innovation, investment, and marketing activities, it is perfectly legal. Market power is less durable in markets character-
ized by a high level of innovation, and thus, by dependence on IP rights.

Intellectual property cannot be presumed to establish market power.\textsuperscript{11} While intellectual property grants exclusive rights, these rights are not monopolies in the economic sense; they do not necessarily provide a large share of any commercial market and they do not necessarily lead to the ability to raise prices in a market. Where products are differentiated, a company can have constrained market power without being a monopolist. This is particularly likely in markets in which IP rights are important.\textsuperscript{12} An IP right may actually prove so successful that it gives rise to a market dominant position. Such a position, however, is not the result of IP protection, but rather, of the market situation (lock-in, network effects).\textsuperscript{13} Market power can only be determined by an actual economic analysis of the anti- and pro-competitive aspects of the actual use and ownership of the specific piece of intellectual property. A single patent, for example, and especially a copyright, may have dozens of close substitutes.\textsuperscript{14} The mere presence of an intellectual property right does not permit an antitrust enforcer to skip the crucial steps of market definition and determining market effects.

In the view of the Department of Justice and the Federal Trade Commission, the idea that IP rights cannot be presumed to create market power is a settled question.\textsuperscript{15} The European Court of Justice (ECJ) adopts the same approach.\textsuperscript{16} In \textit{Deutsche Grammophon v. Metro-Grossmarkte}, the ECJ held that the exercise of exclusive distribution rights under a sound recording copyright does not automatically translate to dominance; there must be some further showing of effective competition over a considerable part of the relevant market.\textsuperscript{17} Similarly, in \textit{Radio Telefis Eireann (RTE) and Independent Television Publications Ltd. (ITP) v. Commission of the European


\textsuperscript{12} See Herbert Hovenkamp et al., \textit{IP and Antitrust} 10-9 (Aspen Law & Business 2006).


\textsuperscript{14} Ralph Jonas et al., \textit{Am. Bar Assoc., Intell. Prop. Misuse: Licensing and Litigation} 165, 184 (ABA Section of Antitrust Law 1999).


\textsuperscript{17} Id. at ¶ 16.
Communities, the ECJ held that mere ownership of IP rights, without more, does not establish dominance.\(^ {18} \)

Consequently, the general approach both in the US and EU is to avoid rigid tests and instead rely on a review of the likely economic effects to the marketplace as a whole, both in the short term and over the long term, factoring in incentives for pro-competitive innovation. Moreover, the presumption of market power would encourage routine filing of tying antitrust claims because the accusers would not need to confront market realities. The increased risk of antitrust liability may discourage IP right owners from enforcing their rights. Both IP law and competition law seek to maintain dynamic, innovative markets far into the future, and to that end they are willing to tolerate a degree of private reward and market power in the present day.

**B. The Recent Supreme Court Case Illinois. Tool Works, Inc. v. Independent Ink, Inc.\(^ {19} \)**

In *Independent Ink*, the Federal Circuit, which handles all direct patent appeals in the US, held that Supreme Court precedent\(^ {20} \) compelled it to conclude that a patent does raise a presumption of market power in an IP tying case.\(^ {21} \) But even the Federal Circuit disagreed with that presumption; in fact, the Federal Circuit’s opinion invited the Supreme Court to reverse, which is exactly what the Supreme Court did.\(^ {22} \)

Illinois Toolwork (ITW) manufactured printing systems made up of piezoelectric impulse jet print heads and inks for use in packaging assembly lines.\(^ {23} \) Patents covered the print head, the ink bottle, and the connection between them.\(^ {24} \) ITW’s license required OEM customers (the assembly line manufacturers) to purchase ink from ITW (license didn’t bind end users, though).\(^ {25} \) Plaintiff claimed this requirement constituted a tying arrangement in violation of Section 1 of the Sherman Act.\(^ {26} \) The Supreme Court ruled:

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22. *Id.*
23. *Id.*
24. *Id.*
25. *Id.*
Nothing in our opinion [in Jefferson Parish] suggested a rebuttable presumption of market power applicable to tying arrangements involving a patent on the tying good. It described the rule that a contract to sell a patented product on condition that the purchaser buy unpatented goods exclusively from the patentee is a \textit{per se} violation of § 1 of the Sherman Act.\textsuperscript{27}

The 1988 patent law amendment requires “proof of market power in the relevant market” for patent misuse defense.\textsuperscript{28} The 1988 amendment invites a reappraisal of the \textit{per se} rule announced in \textit{International Salt}.\textsuperscript{29} The Court concluded:

[T]ying arrangements involving patented products should be evaluated under the standards applied in cases like \textit{Fortner II} and \textit{Jefferson Parish} rather than under the \textit{per se} rule applied in \textit{Morton Salt} and \textit{Loew's}. Liability must be supported by proof of power in the relevant market rather than by a mere presumption thereof.\textsuperscript{30}

The first question, which the Court examined, was whether the presumption of market power in a patented product should survive as a matter of antitrust law.\textsuperscript{31} It answered:

Congress, the antitrust enforcement agencies, and most economists have all reached the conclusion that a patent does not necessarily confer market power upon the patentee. Today, we reach the same conclusion, and therefore hold that, in all cases involving a tying arrangement, the plaintiff must prove that the defendant has market power in the tying product.\textsuperscript{32}

What the Supreme Court did through this decision is make clear that there is no market power presumption through the existence of patents as such. The courts should demand real proof of such market power. However, one could argue that the decision is limited to patent tying and that copyright market power presumption remains arguably intact. But the decision’s logic should extend due to legal certainty and similarity of the cases to copyrights as well.

III. U.S. Law

A. First Principles

This section discusses how the U.S. legal system (Part C. I.) and its courts (C. II., III.) approach the refusal to license cases\textsuperscript{33} and if this

\textsuperscript{27} Id.
\textsuperscript{28} Id. (citing 35 U.S.C. § 271(d)(3)).
\textsuperscript{29} Id.
\textsuperscript{30} Id.
\textsuperscript{31} Id.
\textsuperscript{32} Id.
\textsuperscript{33} It will be a rather sketchy presentation of the US refusal-to-deal cases, since the purpose of this paper is just to show indicatively how the US courts have treated such cases. For a more
approach is similar to the EU's approach to Antitrust enforcement, which focuses on specific anticompetitive actions, as judged by their effects on markets and consumer welfare. In other words, cases at the intersection between intellectual property and antitrust law have been analyzed in the U.S. by examining the impact on economic incentives to innovate and balancing them against anticompetitive effects. There is no quarrel with the fundamental rule that a patent holder has no obligation to license or sell in the first instance. A patent holder is not under any general obligation to create competition against itself within the scope of its patent. Antitrust law does not itself impose an obligation to use or license intellectual property rights, such that a refusal to use or license the right would violate the antitrust laws. Further, such an obligation would conflict directly with the rights granted to an intellectual property owner by the intellectual property laws. Thus, as a general rule, there is no antitrust obligation either to use or license a patent.

B. Refusal-to-Deal Cases

In Data General v. Grumman Systems Support,36 the First Circuit confronted an aftermarket exclusion claim. The Independent Service Organizations (ISOs) were repairing computer hardware, and the "part" they needed access to was Data General's copyrighted diagnostic software. The Court created a rebuttable presumption designed to take the copyright into account: "While exclusionary conduct can include a monopolist's unilateral refusal to license a copyright, an author's desire to exclude others from use of its copyrighted work is a presumptively valid business justification for any immediate harm to consumers". Rebuttable presumptions offer somewhat less predictability, but permit courts to delve into the factual context of the cases before them in order to determine the competitive effect.

lengthy analysis, see among others Kenneth L. Glazer and Abbott B Libsky, Jr., Unilateral Refusals to Deal Under Section 2 of the Sherman Act, 63 ANTITRUST L.J. 749 (1995).


35. See, e.g., Cont'l Paper Bag Comp. v. E. Paper Bag Comp., 210 U.S. 405 (1908); SCM Corp. v. Xerox Corp., 645 F.2d 1195, 1206 (2d Cir. 1981) ("[W]here a patent has been lawfully acquired, subsequent conduct permissible under the patent laws cannot trigger liability under the antitrust laws.").


37. Data General Corp., 36 F.3d 1147.

38. Id. at 1187.
In its 1997 *Kodak* decision, the Ninth Circuit held that a refusal to license patented parts was a violation of § 2 of the Sherman Act. The court reasoned that patents may have given Kodak a monopoly on some of its parts, but by refusing to sell the parts to independent repair technicians, Kodak was effectively creating a second monopoly in the relevant market for service. The Kodak patents on aftermarket parts were of value in both the market for the parts themselves and the complementary market for servicing photocopiers. This fact, as far as the Ninth Circuit was concerned, meant that Kodak had a duty to sell its parts. Otherwise, it would be reaping the advantages of monopoly in both the parts market and the service market.

The Federal Circuit also concluded in *In re Independent Service Organizations Antitrust Litigation* that a patentee can refuse to license or sell, and is immune under the antitrust laws for that refusal, unless one of the following conditions applies: (1) the patent was obtained by fraud on the PTO; (2) the suit to enforce the patent was “sham” – as that term was defined by the Supreme Court; or (3) the patent was used as part of a tie-in strategy to extend market power beyond the legitimate confines of the patent grant.

In *Verizon Communications, Inc. v. Law Offices of Curtis v. Trinko, L.L.P.*, the United States Supreme Court found that private plaintiffs did not state an antitrust claim when they alleged a failure by a communications provider, Verizon, to provide adequate assistance to its rivals: Compelling firms to share the source of their advantage “may lessen the incentive for the monopolist, the rival, or both to invest in those economically beneficial facilities” and “also requires antitrust courts to act as central planners. . .a role for which they are ill suited.” An enforcement agency should thus not impose a duty to deal that it cannot reasonably supervise, since this risks assuming the day-to-day controls characteristic of a regulatory agency.

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40. Eastman Kodak Co., 125 F.3d 1195 (9th Cir. 1997).
41. Id.
42. Id.
43. Id. (citing Prof’l Real Estate Investors, Inc. v. Columbia Pictures Indus., Inc., 508 U.S. 49 (1993)).
46. Id.
47. Id. at 408.
48. Id. at 415 (quoting Phillip E. Areeda, *Essential Facilities: An Epithet in Need of Limiting Principles*, 58 Antitrust L.J. 841, 853 (1989)).
a number of reasons given in *Trinko* for refusing to impose a duty to deal, including the absence of an earlier, voluntary business relationship between the defendant and its competitors\(^{49}\) and the presence of an extensive regulatory framework dealing with the issues that the plaintiff sought to have governed by the antitrust laws.\(^{50}\)

C. *The Particularity of U.S. Law with Regard to the Misuse and Merger Doctrines*

The U.S. law does not approach the interface issues between Intellectual Property and Antitrust law only through Section 2 of the Sherman Act as abuse of monopoly; U.S. law also approaches the issues internally in the IP system itself through the doctrines of misuse and merger, which limit the legal monopoly of the IP owner. The merger doctrine holds that if an idea and the way to express it are so intricately tied that the ways of expression have little possible variation, there will not be copyright infringement, lest the copyright prevent others from expressing the same idea (idea/expression distinction).\(^{51}\)

Moreover, the U.S. courts use another flexible and powerful tool - the misuse defense - in order to avoid the adverse effects of compulsory licensing on innovation.\(^{52}\) Actually, the misuse doctrine is brought by the defendants as an "aggressive" defense against the plaintiff who misuses his/her IP patent or copyright. The courts can, in any case, use the flexible misuse doctrine as a balancing tool when deciding cases at the interface of intellectual property and competition law. However, because of the legal uncertainty of such a fact-specific misuse approach and the unforeseeable weakening of IP rights in favor of the competition process, especially in a fiction as the Internal Market of the EU, such a misuse defense could not be applied practically in EU law. The misuse doctrine "arose to restrain practices that did not in themselves violate any law, but that drew anticompetitive strength from the patent right, and thus were deemed to be contrary to public policy."\(^{53}\) The policy rationale was that the misuse doctrine would prevent the IP owner from using the IP right to obtain benefits beyond those granted by statute.\(^{54}\) While the doctrine "has evolved separately from the antitrust laws. . .it is used to attack patent licens-

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50. *Id.* at 412-13.
54. *Id.*
ing practices that are claimed to be undesirable from a public policy standpoint.\textsuperscript{55} If successful, a misuse defense renders the patent unenforceable against anyone until the misuse has been eliminated and the effects on the marketplace have been purged.\textsuperscript{56}

As a general rule, the misuse doctrine has a broader scope than that of antitrust laws. Although there is a large amount of overlap between the two, as long as antitrust concerns such as market structure, intent, and anticompetitive effect can be met. However, the misuse doctrine may limit the validity of an IP right for behavior that does not rise to the level of an antitrust violation.\textsuperscript{57} With the exception of non-economic reasons why the doctrine should apply (e.g. fraud on the patent office), this represents a serious flaw in the doctrine itself.\textsuperscript{58} The test the Federal Circuit uses in its patent misuse jurisprudence examines whether, "the patentee has impermissibly broadened the physical or temporal scope of the patent with anti-competitive effect."\textsuperscript{59}

Two fairly recent cases in the U.S. have shed light on the danger to eliminate competitive products from a secondary market through the imposition of IP rights. The Sixth Circuit case \textit{Lexmark International, Inc. v. Static Control Components, Inc.}\textsuperscript{60} referred to ink for printers. \textit{Chamberlain Group, Inc. v. Skylink Technologies, Inc.}\textsuperscript{61} was about the market-control of remote-controllers of automatic garage doors. What the competitors of the copyright owner at the secondary market needed in both cases was first access to the protected computer program – that was only possible after circumvention of the technical precautionary measures – and then the reproduction of the program as such in order to be able to offer competitive ink for printers or remote controllers. The Sixth Circuit doubted the copyrightability of the relevant computer programs, ruling that in a situation where external factors like technical specifications, hardware or software standards, programming practices, or just efficiency considerations limit the choice of possible alternatives on the specific computer program, then

\textsuperscript{56} \textit{Id.}
\textsuperscript{58} \textit{Id.}
\textsuperscript{59} Windsurfing Int'l, Inc. v. AMF, Inc., 782 F.2d 995, 1001-02 (Fed. Cir. 1986) (internal quotations omitted).
\textsuperscript{60} \textit{Lexmark Int'l, Inc. v. Static Control Components, Inc.}, 387 F.3d 522 (6th Cir. 2004).
\textsuperscript{61} \textit{Chamberlain Group, Inc. v. Skylink Techs., Inc.}, 381 F.3d 1178 (Fed. Cir. 2004).
there is a merger ("merger doctrine"\textsuperscript{62}) of the (non-copyrightable) idea and expression, and as a result, there is no copyrightability of the computer program. As opposed to U.S. law, the European copyright regime does not have a merger or misuse doctrine that could possibly facilitate flexibility by the legal judgment of a case. This seems to be problematic in light of the relatively shallow threshold, especially for the protection of computer programs.

IV. EU LAW

A. First Principles

The EU law, due to institutional and structural impediments, approaches the interaction between IP law and competition law through EC Article 82.\textsuperscript{63} The flexible misuse doctrine cannot apply Union-wide, since it is difficult for the varying national intellectual property policies to be incorporated into the construction of Union-wide competition law, and it is impossible for the national courts to incorporate European competition policy concerns into their national intellectual property laws.

Under EC Article 82, competition law can only act in "exceptional circumstances" to place a limit on the lawful exercise of intellectual property rights.\textsuperscript{64} The existence or the essence of intellectual property rights is not affected by the rules on competition.\textsuperscript{65} Under EU law, the Volvo decision still defines the core principle in applying EC Article 82 to intellectual property matters: the refusal to license a right as such does not constitute an abuse of a dominant position.\textsuperscript{66} In other words, the EU law, like the U.S. law, disrupts the balance between IP protection and competition law in favor of the latter only in "exceptional circumstances." Otherwise, the rule remains that IP rights should be enforced.

\textsuperscript{62} Lexmark, 387 F.3d at 535, 539, 542-44; see also Baker v. Selden, 101 U.S. 99, 101-02 (1879) (explaining that while a book describing a bookkeeping system is worthy of copyright protection, the underlying method described is not).

\textsuperscript{63} ANDREAS Heinemann, Immaterialgüterschutz in der Wettbewerbsordnung 303 (Tiibingen 2002).

\textsuperscript{64} Id.

\textsuperscript{65} INGE GOVAERE, The Use and Abuse of Intellectual Property Rights in EC Law 104 (Sweet & Maxwell 1996).

B. Refusal-to-Deal Cases

In Oscar Bronner, the ECJ identified the required “exceptional circumstances” as involving the following conditions: (1) that the refusal would be likely to eliminate all competition in the daily newspaper market by Oscar Bronner; (2) that the refusal could not be objectively justified; and (3) that the service be indispensable to carrying on Oscar Bronner’s business, whereby there was no actual or potential substitute.

The ECJ then ruled in Magill that, in order to find an abuse, there must be three cumulative conditions: (i) the product to which the refusal to supply relates is an indispensable input required for the marketing of a new product which the holder of the IPR does not offer and for which there is a potential demand; (ii) there is no justification for such refusal; and (iii) the dominant company reserves for itself a secondary downstream market. The first condition requires two elements: the indispensability of the input and the failure of the IP right owner to exploit its rights to offer the downstream product. The status of the second condition identified by the ECJ depends on whether “objective justification” includes the reward for innovation that underlies the grant of a monopoly under IP law. The third condition identified by the ECJ is arguably the only condition inconsistent with the existence of the IP right since a refusal to license is inherent in the legal monopoly conferred by the IP right.

The ECJ made the point that the dominant position of the TV companies was based on the de facto monopoly enjoyed by them by force of circumstances over the information used to compile listings for TV programs. It emphasized that the true test of market dominance was possession of economic strength in a market, i.e. the ability to behave independently of competitors and consumers, a test which presupposes an economic analysis of market strength. However, if mere ownership of the IP right occurs in conjunction with a de facto monopoly on a market, and that is sufficient to justify a finding of dominance, then the existence of ownership alone can confer dominance.

72. See ANDERMAN, at 209.
The ECJ, in *IMS Health*, concluded that it is possible to interfere with the specific subject matter of an IP right on the basis of EC Article 82 (imposing compulsory licensing on the right holder) when special circumstances exist: (a) the protected product or service must be indispensable for carrying on a particular business, (b) the refusal is such as to exclude any competition on the secondary market, (c) the refusal prevents the emergence of a new product for which there is potential consumer demand and (d) the refusal is not objectively justified. In reaching this conclusion, the ECJ stated that it was sufficient that "a potential market or even a hypothetical market can be identified," noting that such would be the case where "the products or services are indispensable in order to carry on a particular business and where there is an actual demand for them on the part of undertakings which seek to carry on the business for which they are indispensable." In *Microsoft*, the Commission examined the indispensability of interface information against the existence of actual or potential substitutes. According to the Commission, neither reverse engineering, nor open industry standards, nor the access ensured by the communication licensing program created in the U.S. are alternative ways for Microsoft competitors to achieve interoperability of their products. The Commission noted that "Microsoft's refusal puts Microsoft's competitors at a strong disadvantage in the workgroup server operating system market, to an extent where there is a risk of elimination of competition." The crucial question for the Commission seems to be whether the refusal to license reduces the incentives to innovate in the whole industry. Microsoft's incentives to innovate in the workgroup server operating system will be reduced in case of non-disclosure because of the absence of competitive pressure. There will be no further

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78. *Id.* ¶ 143
analysis here of the Microsoft case since the European case concentrated "on the problems of server software markets and integration of the media player into the operating system," whereas the U. S. case focused "on the browser and the Java problem." 80

IV. THE WAY OF CONVERGING THE TWO SYSTEMS THROUGH SPEAKING THE SAME LANGUAGE OF LAW AND ECONOMICS

A. Introduction

The above presentation of how the U.S. and EU legal systems approach the interface between IP and competition law with regard to refusal-to-deal cases has demonstrated one principle: even if there are institutional, procedural, and structural differences, there is a single language that is, and could be, similarly spoken by the U.S. and EU courts. This language consists of commonly understood legal terms and economic analysis. 81 The proposed common language that could be applied by the courts on both sides of the Atlantic in refusal-to-deal cases includes two cumulative steps: First, the courts should examine whether there is the "possibility of competition by substitution" 82 and a "de facto monopoly on the downstream market." 83 These two legal terms should be the first two criteria for the finding of an anti-competitive abuse of IP rights. 84 The second step of the proposed analysis would consist of an economic balancing between the pro- and anti-competitive effects of the IP owner's refusal to deal. 85

Especially now that the U.S. and EU competition laws seem to orientate themselves toward an economic-based approach of both Section 2 of the Sherman Act and EC Article 82, 86 a way of bringing together the legal and economic language of the U.S. Supreme Court and the ECJ seems more possible and feasible than ever. The proposed common language is not only a game with words, as its application for the hypothetical resolution of two already existing cases before the ECJ and the U. S. Supreme Court shows. 87 It is a method

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80. Andreas Heinemann, Compulsory Licenses and Product Integration in European Competition Law, 36 IIC 2005, 63, 75 (2005). There could be a comparison of the U.S. and E.U. case only with regard to the remedies imposed. See id. at 78.
81. See infra Part V.C.
82. See infra Part V.D.
83. See infra Part V.E.
84. Similarly for an abandonment of the "new product"-requirement. Leistner, supra note 69, at 161.
85. See infra Part V.F.
86. See infra Part V.B.
87. See infra Part V.G.
of communication between the two legal systems, a way for them to see the same things similarly through a common legal treatment. It is a way of converging the two legal systems which have the most developed IP and Antitrust laws. This convergence could bring some legal certainty into this area of law, especially through the application of the proposed two-step-test, and would become an example for the resolution of refusal to deal cases at the interface of IP and competition law for other developing countries.

B. The Current Discussion in the EU for the Application of EC Article 82 on an “Economic Approach” Basis

The EU Commission has recently begun an internal examination of the policy underlying EC Article 82 and the way in which the Commission should enforce that policy. The examination suggests a framework for the continued rigorous enforcement of Article 82, building on the economic analysis carried out in recent cases, and setting out one possible methodology for the assessment of some common abusive practices. An economic-based approach to the application of Article 82 implies that the assessment of each specific case will not be based on the form that a particular business practice takes (for example, exclusive dealing, tying, etc.), but rather, will be based on the assessment of the anti-competitive effects generated by business behavior. This implies that competition authorities will need to identify a competitive harm, and assess the extent to which such a negative effect on consumers is potentially outweighed by efficiency gains. The identification of competitive harm requires spelling out a consistent business behavior based on sound economics and supported by facts and empirical evidence. An economics-based approach will naturally lend itself to a “rule of reason” approach to competition policy, since careful consideration of the specifics of each case is needed, and this is likely to be especially difficult under per se rules.

In an effects-based approach, the focus is on the use of well-established economic analysis. The ultimate goal is to focus on the important competitive harms while preserving and encouraging efficiency. The economic approach to EC Article 82 is supposed to provide a flexible framework that fosters increased productivity and growth of benefits to consumers. The standard for assessing whether a given practice is detrimental to competition or whether it is a legitimate tool

of competition should be derived from the effects of the practice on consumers.

Moving from a form-based to an effects-based approach has important implications for procedure. Whereas under a form-based approach, it is enough to verify that (i) a firm is dominant, and (ii) a certain form of behavior is practiced, an effects-based approach requires the verification of competitive harm. To do so, the authority must analyze the practice in question to see whether there is a consistent and verifiable economic account of significant competitive harm. The account should be both based on sound economic analysis and grounded on facts. It is, however, necessary to ensure the consistency of the treatment of the various practices that can serve the same anticompetitive effect. This also contributes to enhancing the predictability and, consequently, the effectiveness of competition policy enforcement.

Once a competitive harm has been identified and the relevant facts established, the next step should be to see if pro-competitive effects might counterbalance them. There again, an economic approach first identifies the nature of the benefit for competition and the facts that need to be established. It is only after these steps that a proper balance can be assessed. It is obvious from the discussion above that the approach taken in applying EC Article 82 is becoming analogous to the approach taken in applying Section 2 of the Sherman Act. EU competition law has distanced itself from the normative approach using the principles of “objective justification” and “proportionality,” which were mainly followed until now in applying EC Article 82 to a competitive conduct,89 in favor of following the economic effects-based approach under U.S. law.

C. The Courts Should at Least Speak a Common Legal and Economic Language

As shown above, the courts on the two sides of the Atlantic have not managed to use a common legal or economic language, although they could and it would appear that the basic application of the notions of innovation, competition and indispensability is the same.90 An analysis according to sound economics, which tends to be internationally spoken and admitted, is absent from the decisions of both the Supreme Court and the ECJ. Moreover, the courts use a legal lan-

89. Whish, supra note 5, at 189; Mestmaeker/Schweitzer, supra note 5, at 39.
guage with terms that cannot be mutually understood and adopted. For example, the ECJ ruled in *IMS Health* that "the refusal in question must concern a product that is indispensable for the production of a new product for which there is an unsatisfied consumer demand." Instead, it could rule "the refusal in question must concern a product that creates a *de facto* monopoly for the competition by substitution in the downstream market and thus causes anticompetitive effects in the market." Terms, like "*de facto* monopoly on the downstream market" instead of "indispensability;" "possibility of competition by substitution" instead of "new product in the downstream market;" and an economic efficiency test – balancing the pro- and anti-competitive effects – instead of "unjustified refusal to give access" or "objective/legitimate business justification of the refusal" are, or at least could be, commonly perceived objectively both in the U.S. and EU. Let us now take a look at the proposed legal terms and definitions that are commonly understood by U.S. and EU enforcers.

D. The Distinction between Competition by Substitution and Competition by Imitation and its Implications

In its Guidelines on the Transfer Technology Regulation (TTBER), the Commission has sufficiently made clear that IP rights and competition law coincide in promoting innovation and dynamic competition by excluding imitation. The objective of the IP right is to exclude others from imitation, so as to incite them to compete by substitution. Intellectual property protection reacts to the phenomenon of copying intangible goods by excluding the freedom to compete by imitation, but it does not exclude the possibility of developing a superior intangible good that could compete with the prior good (competition by substitution). Dynamic efficiency, that is, creating incentives for innovation and competitive behavior, is enhanced by

91. Case C-418/01, IMS Health GmbH & Co. OHG v. NDC Health GmbH & Co. KG, 2004 E.C.R. I-5039; see Leistner, *supra* note 69, at 152, (addressing "a new and economically oriented indispensability-test").


competition by substitution and requires the exclusion of competition by imitation.94

Two decisions of the ECJ could give a good illustration of the distinction between competition by imitation and competition by substitution. The competitor who simply intends to imitate the achievements of the right holder does not deserve any protection by competition law (IMS Health), in contrast to a competitor who would be prevented from placing a new product on the market without the grant of the license (Magill). It is difficult however, to imagine that the "new product rule" of the ECJ would work in a case in which the IP system is not deficient but external circumstances prevent the competitor from placing a new product on the market. In such a situation, as for example most of the cases involving software licensing agreements, competition by substitution, i.e. a new product, is not prevented by the refusal to grant the license,95 but by the lock-in effect and possible network effects in the given market. Thus, the examination, if there are some network and lock-in effects limiting any market access, needs a concrete market analysis.

Network effects arise when the value of a network increases with the number of its users. A single firm, perhaps because it is the first mover, becomes or threatens to become the only supplier of certain products or services because of the value of compatibility or interoperability. Consumers are more likely to remain with the established network because of their sunk costs (sometimes referred to as "lock-in") and suppliers of complementary products will tailor those products to the established network and resist preparing products for would-be challengers. In that event, network dominance itself becomes a formidable barrier to entry. In Europe, the Commission stated that, where a de facto industry standard emerges such as the software or the phone service industry, "[t]he main concern will then be to ensure that these standards are as open as possible and applied in a clear non-discriminatory manner. To avoid elimination of competition in the relevant market(s), access to the standard must be possible for third parties on fair, reasonable and non-discriminatory terms."96


The ECJ seems to apply a concept of innovation which fits some cases but not others. If the net effect of compelling a license is "a positive level of innovation of the whole industry, then intervening is considered welfare enhancing". Now that protection has moved upstream to give right holders control over a particular innovation opportunity in exchange for contributing the insight that created it, competition law must be structured to prevent right holders from leveraging control over the innovation opportunity in one product market into control over innovation opportunities in other product markets.

The first criterion of "possibility of competition by substitution," which is proposed here, presupposes that there is no technical or de facto possibility of substitution. For example, the copyright-protected TV listings in the Magill case could not be substituted. A substitution is more difficult by copyrights than by other rights, like patents. A bottleneck situation can result not only through the technical impossibility of substitution, but also through the fact that a substitute is economically impossible. This depends not on subjective intentions, but on objective economic criteria. The development of a profitable substitute must not be objectively possible, in order to find abuse of IP rights.

E. The Leveraging Element and de facto Monopoly

By refusing to license the intellectual property right, the dominant company is not merely using the right in the market for the product or service with which the right is primarily concerned, but is using it to obtain leverage or to protect itself from competition in another, distinct, market. This "monopoly leveraging" applies in two market

100. When a monopolist abuses its monopoly power in one market to gain an improper advantage or to destroy threatened competition in an adjacent market in which it also operates. Advanced Health-Care Servs., Inc. v. Radford Cmty. Hosp., 910 F.2d 139, 150 (4th Cir. 1990) ("... the central concern in an essential facilities claim is whether market power in one market is being used to create or further a monopoly in another market."); see also Twin Labs., Inc. v. Weider Health & Fitness, 900 F.2d 566, 568 (2d Cir. 1990) ("The policy behind prohibiting denial of an essential facility to a competitor... is to prevent a monopolist in a given market... from using its power to inhibit competition in another market."
situations because a competitor in the downstream market that gains control of a necessary input is not offering a better or a cheaper product in the downstream market, but only getting power to harm consumers in that market by shutting out its competitors.\textsuperscript{101}

The main function of the IP rights in such cases is to exclude third parties from the secondary market, which stands closest to the primary market.\textsuperscript{102} There is certainly an influence on the competition process when a dominant firm tries to transfer its market power to another neighboring market in order to shield this market against any competition. In the primary market, the exclusionary effect of the IP right takes precedence over competition law. Only when the IP owner prevents the access to a secondary market should there be a control of the IP right through competition law. Without acknowledging that the IMS Health case was a typical "leveraging" case, the ECJ ruled that a refusal to license IMS Health could quite possibly lead to a total cut-off of a secondary market.\textsuperscript{103}

The competitor must also need the IP right in order to access the secondary market. The second criterion, proposed here, of the "de facto monopoly on a downstream market" refers to the phenomenon where the right, that cannot be substituted, blocks access to another market. The abuse in this case consists of "monopoly leveraging" - the transfer of market power to other markets.\textsuperscript{104} The question, when there are one or two markets related to each other, should be answered through the formula of the "functional interchangeability." Only if the product of the competitor is not functionally interchangeable with that of the dominant firm could one speak about two separate markets. There should be a case-by-case market analysis. The switch-

\textsuperscript{101} According to Pitofsky, Patterson and Hooks, compulsory licensing can be required under US law where the IP right is deemed to be an essential facility without market leveraging. See Robert Pitofsky, et al., \textit{The Essential Facilities Doctrine Under U.S. Antitrust Law,} 70 \textit{Antitrust L.J.} 443, 462 (2002); but see Paul D. Marquardt & Mark Leddy, \textit{The Essential Facilities Doctrine and Intellectual Property Rights: A Response to Pitofsky, Patterson and Hooks,} 70 \textit{Antitrust L.J.} 847, 851 (2003) (To the extent that Section 2 of Sherman Act prohibits monopolization as opposed to the mere existence of market power, it would appear that the possibility of successful leveraging in a downstream market is an indispensable requirement in an IP case brought under Section 2 if the existence of IP rights is to be maintained).


\textsuperscript{103} Andreas Heinemann, \textit{Compulsory Licenses and Product Integration in European Competition Law,} 36 IIC 2005, 63, 75 (2005). The need for two markets is also stressed by John Temple Lang. \textit{Lang, supra} note 102, at 11.

\textsuperscript{104} See Leistner, \textit{supra} note 69 at 150,
ing costs, analyzed by way of thorough market analysis – including eventual network and lock-in effects – will be the decisive factor in assessing the indispensability of the de facto monopoly standard.\textsuperscript{105}

F. Economic Balancing

An economic analysis at this level should take into consideration the balance between the \textit{ex post} allocative efficiency gains, which can be realized by mandating access, with the \textit{ex ante} dynamic efficiency gains, which can be protected by refusing access.\textsuperscript{106} On one hand, mandating that a dominant firm that holds an IP right as an essential facility must share it with one or several competitors will stimulate competition in downstream markets, thus promoting \textit{ex post} (allocative) efficiency. On the other hand, mandatory sharing may reduce the return of the IP holder and thus decrease its \textit{ex ante} incentives to invest and compete dynamically.\textsuperscript{107} Exactly at this point, a difficult (and controversial among economists) economic balancing between the pro- and anti-competitive effects of a refusal to deal should take place.\textsuperscript{108} There must be an overall balancing, where the gravity of the hindrance of access to the secondary market should be taken into consideration.

G. Hypothetical Resolution of Cases through the Common Language

Let us examine how the above-mentioned thoughts apply in practice, resolving hypothetically two already existing cases of the ECJ and the Supreme Court through the use of this common language. These cases are both pretty recent and have caused long discussions.

1. IMS Health

In \textit{IMS Health},\textsuperscript{109} the ECJ established a rule for the circumstances when a refusal by a company in a dominant position to grant a copyright license will amount to the abuse of their dominant position. In

\textsuperscript{105} Id. at 154.

\textsuperscript{106} The rather limited knowledge of the author on economics does not allow him to propose a specific economic model of analysis, but just the general framework that this analysis should pursue.


\textsuperscript{108} Carl Christian von Weizsäcker, \textit{Abuse of a Dominant Position and Economic Efficiency}, 2003 ZWeR 59 (the general review of the criterion of economic efficiency).

\textsuperscript{109} Case C-418/01, IMS Health GmbH & Co. OHG v. NDC Health GmbH & Co. KG, 2004 E.C.R. I-5039.
this case, two German Companies, IMS Health ("IMS") and NDC Health ("NDC") both collected various data on pharmaceutical sales and prescriptions. The data provided by IMS to pharmaceutical laboratories was formatted in a particular structure and was distributed free of charge. In the late 1980's, a director of IMS left to set up another company which sold data similar to that sold by IMS, and which worked with very similar structures to IMS. NDC subsequently acquired the former director's new company. In an action before the local courts in Germany, it was held that the IMS structure system for data collection was protected by copyright. However, the national court held that IMS could not refuse to grant a copyright license to NDC if such refusal would (under EU law) amount to an abuse of a dominant position. The national court referred certain questions to the ECJ in relation to the circumstances under which such behavior would constitute an abuse of a dominant position.

The first requirement of "possibility of competition by substitution" is present here, since the competitor is practically incapable of duplicating the product. As it was mentioned in the facts of the case, IMS had acquired a normal industry standard through its brick structure. Without access to this structure there was no technical or economical possibility for NDC to compete. However, the second requirement of "de facto monopoly on the downstream market" seems to be absent here. That is, there is no other secondary market in this case; there is not even a different product. The brick-structure does not prevent the access to another downstream market: there is only one market - that for pharmaceutical products. Since the second requirement to find an abuse of IP rights is absent, there would be no need to proceed to the third requirement, which is an economic balancing the pro- and anti-competitive effects of the refusal; the refusal is legitimate.

If we applied the above-mentioned thoughts on the IMS Health case of the ECJ, there would consequently be no room for any antitrust violation. Even if one could see two different markets, one in the sales-data of the pharmaceuticals and another in the structure of the databank - although the sales-data are worthless without the structure since there is no independent product - there would not be the cumulative requirements to excuse an antitrust violation. A flexi-

110. *Id.* at 28.
111. See, e.g., Joined cases C-241/91 P and C-242/91 P, RTE v. Commission, 1995 E.C.R. I-743 (1995) (the "Magill case") (the plaintiff wanted to bring a TV-program listing for the whole week, in contradiction to the daily TV-programs that the defendants were offering).
be solution of such a problematic situation, taking also into account
the huge investments of IMS Health in the structure for at least 30
years, could eventually be offered, not by competition law, but by copy-
right law itself through a narrow application of the idea/expression
distinction at the copyrightability level. An equivalent solution is of-
fered in the U.S. law by the merger and faire-a-scene doctrines.

2. Verizon v. Trinko

The facts of the case are as follows:

The Telecommunications Act of 1996 imposes upon an incumbent
local exchange carrier (LEC) the obligation to share its telephone
network with competitors, 47 U.S.C. § 251(c), including the duty to
provide access to individual network elements on an “unbundled”
basis, see § 251(c)(3). New entrants, so-called competitive LECs,
combine and resell these unbundled network elements (UNEs). Peti-
tioner Verizon Communications Inc., the incumbent LEC in New
York State, has signed interconnection agreements with rivals such
as AT&T, as § 252 obliges it to do, detailing the terms on which it
will make its network elements available.114

Respondent... Trinko LLP, a New York City law firm, was a local
telephone service customer of AT&T. The day after Verizon en-
tered its consent decree with the FCC, respondent filed a complaint
in the District Court for the Southern District of New York, on be-
half of itself and a class of similarly situated customers... The com-
plaint... alleged that Verizon had filled rivals' orders on a
discriminatory basis as part of an anticompetitive scheme to dis-
courage customers from becoming or remaining customers of com-
petitive LECs, thus impeding the competitive LECs' ability to enter
and compete in the market for local telephone service... The Com-
plainant sought damages and injunctive relief for violation of § 2 of
the Sherman Act, 15 USC § 2, pursuant to the remedy provisions of
§§ 4 and 16 of the Clayton Act, 38 Stat 731...115

The peculiarity of this case is the existence of a regulatory scheme
(Telecommunication Act), which Justice Scalia assumed to be suffi-
cient for the resolution of this case, thereby avoiding any further anti-
trust analysis. Apart from the Telecommunication Act’s Regulation, it
would be interesting to see how the common legal language proposed
here could be applied in this case. The first requirement of “possibility
of competition by substitution” is present here, since the competitor is
practically incapable of duplicating the interconnection service. As the
decision clearly states, “the services allegedly withheld are not other-

113. Verizon Communications Inc. v. Law Offices of Curtis V. Trinko, LLP, 540 U.S. 398
(2004).
114. Id. at 398.
115. Id. at 404-05.
wise marketed or available to the public."116 Without access to Verizon's platform, there was no technical or economical possibility for AT&T to compete with Verizon. Moreover, the second requirement of "de facto monopoly on the downstream market" seems to be present here. As the decision notes: "The sharing obligation imposed by the Telecommunication Act created something brand new: The wholesale market for leasing network elements."117 In other words, there is another secondary downstream market in this case where competition is de facto prohibited because of Verizon's monopoly in the upstream market. The Court should then proceed to the third requirement, which is an economic balancing of the pro- and anti-competitive effects of Verizon's refusal to share interconnection services. The economic analysis would most likely result in the mandating of Verizon to share its services with AT&T and several other competitors, since this result would stimulate competition in the downstream market for leasing network elements, thus promoting ex post allocative efficiency and outweighing any short-term ex ante dynamic efficiency gains, which can be protected by refusing access to Verizon's services.

VI. Conclusion

The EC competition law becomes more and more economically orientated with regard to the application of EC Article 82, thus approaching the situation of U.S. law where an element of anticompetitive conduct must be present. The idea of an economics-based antitrust regime is no longer greatly controversial in concept. This approach makes possible objectivity, predictability, and transparency, although even economic theory does not have all the answers (and probably never will).118

Competition law and IP law are converging in their aim to ensure an optimum balance between the access to markets and the protection of invention. A model with narrower IP protection and strong competition policy that intervenes only exceptionally suggests an alternative model for innovation. The IP rights are thus not protected in abstracto, but as a substantial medium of competition. If the advantages of the IP system are outweighed by the disadvantages from competition by substitution, only negative effects of competition by imitation remain. It is then a matter of systematic approach if the resolution to the problem of the absence of any competition is offered internally.

116. Id. at 410.
117. Id.
through IP law - like in the U.S. through the doctrines of *merger* and *misuse* - or externally through competition law, like in EU law. The best solution would consist of limiting the IP right to its appropriate scope through a flexible IP-related approach, such as the misuse doctrine, thus relying on the theory of complementary goals of IP and competition law.

However, an American-type synthesis of intellectual property and competition law is more difficult in Europe because the European Union currently possesses a Union-wide competition law, but mostly national intellectual property laws. As a result, it is more difficult for the varying national intellectual property policies to be incorporated into the construction of Union-wide competition law. It is also difficult, albeit not impossible, for the national courts to incorporate European competition policy concerns into their national intellectual property laws. These impediments to harmonization within Europe, of intellectual property law with competition law, mean that the interactions of these two sets of laws are likely to produce a less than efficient result.

What is made clear through the use of common legal language between US and EU law is that this common language can be also used to describe situations on the interface between IP and competition law. These two distinct fields of law can use common terms to describe and resolve cases in their intersection, such as when they are dealing with situations where IP law has to take into account competition policy issues. And these situations are numerous if somebody considers the cases referring to the misuse, merger, faire-a-scene doctrines and functionality problems.

In the case of network effects, where competition by substitution is not possible, the right holder's freedom to license would result in overbroad protection and the IP right does not have the capacity to promote dynamic competition. Therefore law has to postulate a duty to license the IP right to the competitors at reasonable fees. In these rare market situations in which IP protection does not reach its goal of promoting dynamic efficiency, a duty to deal should be accepted so as to guarantee at least allocative efficiency. From an economic point of view, such a compulsory licensing should take place if exploitation by the licensee has allocative advantages in comparison to exploitation by the right owner and there is *de facto* no competition by imitation anymore.119

The copyright was not the cause of IMS Health's dominant position, even in the market for the copyright in the brick structure. The problem is that the lock-in effect excludes any other method of collecting data from the relevant market. In such a situation where a company holds market power, the company, by definition, will not feel pressure to innovate or it will be incited to create barriers to entry for potential competitors and forget to improve its own products by continued introduction of superior technology in the market. Still, competition may be restored by allowing imitation. Although the exclusive right is not the cause of market power, the competition problem may be cured by restricting the exercise of the exclusive right.\textsuperscript{120}

The rationale for the imposition of a duty to deal under these circumstances is not to create competition in the market which is the subject of the intellectual property protection, for that exclusivity is indeed within the statutory monopoly conferred by the patent or copyright statutes. Rather, it is to allow competition in complementary markets which are not within the scope of the patent or copyright monopoly. Patent and copyright owners will continue to be able to exploit fully the monopoly conferred by those grants, and they will be limited only in attempts to extend that monopoly beyond the proper scope of the grant. Therefore, the holder of a dominant position has to make considerable efforts to keep the barriers to entry in the neighboring markets as low as possible. The solution is to keep the relevant markets as open as possible.\textsuperscript{121} This result would best advance the principal goal of the antitrust laws – and one which is hardly inconsistent with patent or copyright law – of increasing competition and maximizing consumer welfare.

\textsuperscript{120} Hanns Ullrich, \textit{Gewerblicher Rechtsschutz und Urheberrecht im Gemeinsamen Markt, 1EG-WETTbewerbsrecht 1250} (1997).
