May be cited as 40 IIC page (2009) · ISSN 0018-9855

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Published monthly except in January, April, July and October (8 times per year). Normal subscription rate: €348. Single issue €48. Prices for other countries by request. Postage and handling fees will be added. Cancellation of subscriptions: Publisher must be notified no later than 6 weeks prior to the end of the calendar year.





# IIC International Review of Intellectual Property and Competition Law

Volume 40
No. 7/2009
Pp. 751–880

Published by the Max Planck Institute for Intellectual Property, Competition and Tax Law, Marstallplatz 1, D-80539 Munich, Germany


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## Contents

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# Patenting Standards – A Case for US Antitrust Law or a Call for Recognizing Immanent Public Policy Limitations to the Exploitation Rights Conferred by the Patent Act?**

**This paper examines the adverse effect of patent ambushing on competitive conditions resulting in the distortion of the standardization process in markets where the effectiveness of competition relies heavily on standardization. The US *Rambus* litigation serves as a point of departure. In this case, the strategic behavior of the patentee was subjected to both an antitrust and unfair competition analysis. Both approaches display an inadequacy to squarely balance all of the conflicting interests involved. The solution proposed is to apply the patent misuse doctrine as a rule that expresses a public policy defense against patent enforcement so as to ensure the precompetitive function of standard-setting bodies. The argument is then taken further by addressing the issue of whether public policy limitations of patent rights are necessary in network industries in order to achieve welfare-enhancing reductions of the exclusionary effect of the patent.**

## I. *Introduction: Patent Ambush as a Business Strategy*

The term "patent ambush" refers to tactical maneuvers of patent holders during the standardization process with the purpose of establishing proprietary rights on the standard to be adopted. The typical scenario involves participants in Standard Setting Organizations (SSOs) concealing or misrepresenting their patent interests on technologies that are about to be incorporated into the standard. While observing the development of the standardizing activity they keep perfecting their patent claims so as to be able to hold-up the commercialization of the end product and negotiate licensing fees from an advantageous position.[1] Patent rights are asserted at a point where it is uneconomic or gravely inconvenient to shift to other technologies due to irreversible sunk investments. The industry is in this sense locked-in by the standard and subject to the monopolistic royalties of the patentee. The

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** Research was undertaken at the Max Planck Institute for Intellectual Property, Competition and Tax Law (Munich). While responsible for any shortcomings, the author is thankful to his Ph.D supervisor Prof. Dr. Josef Drexl for helpful comments and suggestions.

1 This is another example of the patent system's failure to provide adequate notice so as to protect the investment decisions of third parties. Patent continuations create a significant potential for abuses that aim to exclude competitors who have independently produced the patented invention prior to the broadening continuation. *See* LEMLEY & MOORE, "Ending Abuse of Patent Continuations", 84 B.U.L. Rev. 63–118 (2004).



question arising is whether the patentee acquires and exercises monopoly power in a legitimate manner.

Recently, the Court of Appeals for the Federal Circuit[2] answered in the affirmative reversing a ruling from the FTC[3] that held this type of conduct as exclusionary under Sec. 2 of the Sherman Act. The case concerns the conduct of a technology licensing company, Rambus, within the proceedings of the JEDEC Solid State Technology Association (JEDEC), a standard-setting body that develops standards for hardware interfaces. JEDEC was developing a technical standard for a form of computer memory known as dynamic random access memory (DRAM) at that time. Rambus took part without disclosing its patent position, namely that it was developing patents and possessed pending patent applications on technologies that were being considered and finally adopted in JEDEC's industry-wide standards. JEDEC and its members were deceived in that they proceeded to adopt a standard based on a certainty that it was going to be an open one. Up to this moment there has been no substantive ruling for the same legal question in Europe. The European Commission has sent a statement of objections to Rambus and both parties have reached a tentative settlement providing for maximum royalty rates. This paper is therefore focused on the legal assessment to be made under US Law and provides only a short overview of the legal situation in Europe.

The article proceeds in eight parts. Part II sketches the relevant antitrust principles. Part III analyzes critically the possible antitrust argumentation that supports the rulings of both the FTC and the D.C. Circuit. Consideration is given to other judicial opinions as well. The opinion of the D.C. Circuit is considered as rightfully negating antitrust applicability to patent ambushing in view of its potentially over-deterrent sanction system and the general postulate of respecting the competency of the patent system to regulate innovation. The legal problem is thus relegated to another set of norms, the applicability of which will be examined in the following parts.

Part IV turns an eye to those opinions that have attempted to apply the unfair competition cause of action to the legal problem under consideration. The core legal issue addressed there is the relationship between antitrust and unfair competition theories of liability and more specifically the breadth of FTC authority to forbid unilateral actions in competition that fall short of an antitrust violation. It is affirmed that the Sec. 5 theories developed by the FTC do not contradict the antitrust doctrine.

Part V argues that antitrust and unfair competition theories can neither effectively deter patent ambushing nor enhance static and dynamic efficiency

2 *Rambus, Inc. v. FTC*, 522 F.3d 456 (D.C. Cir. 2008).

3 *In the Matter of Rambus, Inc.*, Docket No. 9302, available at http://www.ftc.gov/os/adjpro/d9302/060802commissionopinion.pdf.

by widening the access to the standard. This can also be said for contractual remedies and some equitable enforcement-related patent law doctrines such as denial of automatic injunctions or estoppel. The remedy that could deter ambushing in network industries and steer inventive effort to socially desirable innovation within the standard is patent unenforceability. Patent ambush is thus a matter of patent scope and coordination of inventive activity according to the public interest. It is, in other words, a patent law problem. The relevant legal doctrine is that of patent misuse.

Part VI examines the legal nature of the misuse defense. It purports to dissolve the misunderstanding that misuse has been a doctrinal tool of equity, implementing the inherency doctrine in order to confine the patentee to rewards that are directly related to his right of exclusion. The misuse doctrine is presented as a substantive limitation of patent exploitation for public policy reasons. In this respect it implements the incentives paradigm of patent law at the enforcement stage. Simultaneously it is shown that the misuse theory exists in common law supplementing the Patent Act, has an autonomous field of application and has not been absorbed by the antitrust laws.

Part VII deals with the specific application of the misuse theory in industries characterized by network effects. Part VIII examines the extent to which the proposed solution is arguable in Europe. Part IX provides a brief summary and conclusion.

## *II. Exclusionary Conduct Under Section 2 of the Sherman Act*

The monopolization offense is committed when monopoly power is willfully acquired or entrenched through exclusionary conduct. Illegal monopolizing behavior is usually negatively defined by way of contrast to growth or development as a consequence of a superior product, business acumen, or historic accident.[4] Section 2 of the Sherman Act is generally permissive of competitive efforts to expand, which harm or even drive rivals out of the market, where they are based on better performance. Such rigorous competition is axiomatically presumed to enhance social welfare.[5]

The purpose of the provision dictates some general rules that accompany its judicial application:[6]

(a) For unilateral conduct to fall within the ambit of Sec. 2, the actor must either possess or be likely to achieve market power;

4 *U.S. v. Grinnell Corp.*, 384 U.S. 563, 570–571 (1966); *Eastman Kodak Co. v. Image Technical Services, Inc.*, 504 U.S. 451, 481 (1992); *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 472 U.S. 585, 595–596 (1985).

5 Areeda & Hovenkamp, "Antitrust Law: An Analysis of Antitrust Principles and Their Application", (3rd ed. 2008), § 630(b).

6 *See* generally Holmes, "Antitrust Law Handbook" Sec. 3–5 (2008–2009). (Report of FTC in Sec. 2 has been withdrawn).



(b) Only the anticompetitive acquisition or maintenance of monopoly power is unlawful, not its mere possession or exercise;[7]

(c) Harm to competitors lies in the nature of competition. Antitrust liability arises therefore when the competitive process is hindered to the detriment of consumers[8]

(d) Since the difference between pre- and anticompetitive conduct is often not easily discernable, courts have to take account of the dangers of over-deterrence (false positives) and under-deterrence (false negatives)[9]

(e) The administrative enforcement costs and the effect of antitrust rules on firm decision making are also part of the inquiry.[10]

The concrete application of those principles cannot be uniform as the various types of unilateral action in competition have their own potential to promote or threaten consumer welfare.[11] It makes sense, for instance, to be tolerant of predatory pricing because it delivers the palpable consumer benefit of lower prices. The same holds true for unilateral refusals to deal, since imposing obligations to assist rivals is highly likely to reduce incentives to compete vigorously and chill innovation. For that reason courts address these issues by deploying legal tests that tend to eliminate false positives such as the "profit sacrifice" or the "no economic sense" test.[12]

Therefore, the common-law notion of reasonableness guides the application of Sec. 2 in that it mandates a different legal treatment for various types of conduct so as to achieve the welfare-maximizing result in each individual case. The rule of reason has therefore a field of application, which precedes the treatment of specific facts.[13] This becomes clearer when one turns to Sec. 1 cases. Before proceeding to the substance, courts must first choose the legal test that enhances social welfare by deciding whether the per se rule or the rule of reason is applicable in the case at hand.[14]

7 *Standard Oil Co. v. United States*, 221 U.S. 1, 61–62 (1911).

8 *Brunswick Corp. v. Pueblo Bowl-O-Matt, Inc.*, 429 U.S. 477, 489 (1977); *Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.*, 509 U.S. 209, 226 (1993); *Nynex Corp. v. Discon*, 525 U.S. 128, 135, 139 (1998).

9 Easterbrook, "The Limits of Antitrust", 63 Tex. L. Rev. 1 passim (1984); *Verizon Communications Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398, 415 (2004).

10 *Id.*

11 Lao, "Defining Exclusionary Conduct Under Section 2: The Case for Non-Universal Standards" in: Hawk (ed.), "International Antitrust Law & Policy" 2006 Fordham Comp. L. Inst. 433, 434 (2007).

12 Elhauge, "Defining Better Monopolization Standards", 56 Stan. L. Rev. 253, 270-271 (2003) presenting relevant case law. *See also* Werden, "Identifying Exclusionary Conduct Under Section 2: The 'No Economic Sense' Test", 73 Antitrust L.J. 413–433 (2006).

13 Popofsky, "Defining Exclusionary Conduct: Section 2, the Rule of Reason, and the Unifying Principle Underlying Antitrust Rules", 73 Antitrust L.J. 435, 437 (2006).

14 The rule of reason becomes thus relevant in various levels of norm application.

## *III. The Application of Section 2 of the Sherman Act to Patent Ambush*

The legal issue arising here is whether the unilateral acquisition of monopoly power through exploitation of the standard-setting process to gain control over standardized technologies is exclusionary. On this issue there is no judicial unanimity.[15]

### A. Undermination and Subversion of the Standard-Setting Process as Concepts of Competitive Harm

Standard-setting activity is of utmost importance in industries characterized by network effects; it pursues interoperability and compatibility among the various products within the network.[16] In addition, voluntary consensus on a standard among industry participants facilitates the commercialization of new technologies in a highly efficient manner. In a standardized environment the market grows in size fostering economies of scale, as multiple suppliers are brought together in a more or less homogenous product market. Competition on the price is then intensified to the benefit of the consumer.[17] Efficiencies generated by the standardization process are harnessed where patent hold-ups are confronted. The monopolistic behavior of the patentee increases the cost of marketing technology in standardized form. The situation becomes worse where there are more patent holders and royalty stacking occurs.[18] Standardization bodies serve as forums providing the possibility to avoid this problem by collective bargaining.[19]

In the light of the precompetitive function of SSOs there is a significant strand of judicial opinions that declare distorting the standardization process as a harm to competition. The authority that pointed down this path was *Allied Tube and Conduit Corp. v. Indian Head, Inc.*[20] At the time of that decision it was a well-established rule that group action to influence legislative, executive, administrative or judicial decision making was immune from antitrust laws.[21] The purpose of this doctrine was to guarantee the exercise of fundamental rights such as the right to petition the government, to file suit in the courts and facilitate communication with governmental decision-

15 A Supreme Court's ruling is unfortunately missing. The FTC's petition for *certiorari* in *Rambus* has been rejected.

16 For these consumer benefits *see* MOTTA, "Competition Policy" (2004), at 82–83.

17 *Broadcom Corp. v. Qualcomm Inc.*, 501 F.3d 297, 309 (3rd Cir. 2007).

18 LEMLEY & SHAPIRO, "Patent Holdup and Royalty Stacking", 85 Tex. L. Rev. 1991–2049 (2007).

19 LEMLEY, "Intellectual Property Rights and Standard-Setting Organizations", 90 Cal. L. Rev. 1889, 1950 (2002).

20 *Allied Tube and Conduit Corp. v. Indian Head, Inc.*, 486 U.S. 492 (1988).

21 The so-called "*Noerr-Pennington* Doctrine" was formulated in *Eastern R.R. Presidents Conference v. Noerr Motor Freight*, Inc., 365 U.S. 127 and *United Mine Workers of America v. Pennington*, 381 U.S. 657.



makers.[22] In *Allied Tube*, the petitioner's action of conspiring with others to exclude the defendant's competing product from the catalogue of approved products of the National Electrical Code was held to amount to an unreasonable restraint of trade. The "*Noerr-Pennington*" immunity did not apply because the petitioner's conduct took place in the context of a private standard setting group, the National Fire Protection Association. It was not only the private character of the SSO[23] that led to this outcome though, but also the concern to keep the operation of SSOs undistorted so as to fulfill their precompetitive role.[24]

The rulings of the FTC in *Rambus*[25] and of the Third Circuit in *Broadcom Corp. v. Qualcomm Inc.*[26] elaborate upon this line of argumentation. Withholding information about proprietary interests on a technology under consideration obscures the costs of its incorporation into the ultimate standard. Adoption of this technology leads to licensing fees and prices for compatible products that are higher than those which would have resulted if the SSO had had all necessary information to make a fully informed choice of technol-

22 FEDERAL TRADE COMMISSION, "Enforcement Perspectives of the *Noerr-Pennington* Doctrine" 6 *et seq.* (2006), analytically presenting the doctrinal evolution, available at http://www.ftc.gov/reports/P013518enfperspectNoerr-Penningtondoctrine.pdf.

23 Whether misrepresentations directed at a governmental standard-setting body enjoy the *Noerr-Pennington* immunity is also an issue thoroughly examined by the FTC. *In the Matter of Union Oil Company of California,* Docket No. 9305, available at http://www.ftc.gov/os/adjpro/d9305/040706commissionopinion.pdf. Since the matter is peripheral for the purposes of this paper, it will not be examined in detail but only very briefly addressed here. Unocal misrepresented its patent interests and enforcement intentions to competing gasoline refiners and to the California Air Resources Board (CARB). As a result, the new standards for automobile fuels were substantially overlapping its patents. Unocal claimed that such misrepresentations to other participants, so as the latter unconsciously induce the executive authority to regulate in its favor, amount to indirect petitioning to the government in order to influence the passage of laws protected by *Noerr-Pennington.* The legal problem was whether there is a general misrepresentation exception to this immunity since the judicially recognized explicit exceptions ("Sham litigation" and "Walker Process") did not apply to the case at hand. FLOYD, "Antitrust Liability for the Anticompetitive Effects of Governmental Action Induced by Fraud", 69 Antitrust L.J. 403, 422, 423–425 (2001). Taking into account the hybrid constitutional and antitrust policy underlying the immunity the decisive question becomes, whether the misrepresentation takes place within the political arena or not. *Unocal*, at 32 *et seq.*; *Kottle v. Northwest Kidney Centers*, 146 F.3d 1056, 1061 (9th Cir. 1998); for the necessity of a purposive interpretation of the *Noerr-Pennington*, *see also* AREEDA & HOVENKAMP, *supra* note 5, at 182, Sec. 203(f). After weighting the relevant factors including the basis of the nature of government expectations, the degree of governmental discretion, the necessity to rely on Unocal's assertions, the ability of CARB to determine a causal link between the petitioning conduct and an ensuing governmental action, the FTC held the antitrust laws applicable. *In the Matter of Union Oil Company of California*, at 37–45.

24 *Allied Tube and Conduit Corp. v. Indian Head, Inc., supra* note 20, at 501.

25 *In the Matter of Rambus, Inc., supra* note 3, at 36.

26 *Broadcom Corp. v. Qualcomm Inc., supra* note 17.

ogy.[27] In *Broadcom* the Third Circuit indicated that the efficient selection of preferred technologies could also be distorted even if the participant does in fact reveal its proprietary interests on the technology to be adopted. The deception can refer to the extent and the use of the monopoly power that would result from the standardization of the patented technology and the lock-in created by the standard. Qualcomm was alleged to have induced the European Telecommunications Standards Institute (ETSI) into adopting its technology into a 3-G telecommunications standard by making a representation that it would then license on Fair, Reasonable and Non-Discriminatory (FRAND) terms. Thereafter Qualcomm began charging discriminatory royalties to firms using cellular phone chipsets manufactured by its competitors in an attempt to strengthen its power over third-generation mobile technology. In this way, the standardization process was subverted by a less efficient choice because the actual cost of commercializing the standardized product was concealed.[28]

In some cases the deceptive conduct may not have subverted the standardizing procedure because the monopoly power acquired by the patentee would have been the natural result of the process within the SSO; for example where there is no alternative technology. The FTC suggests in *Rambus* that patent ambush would even then violate Sec. 2 of the Sherman Act because such conduct, if permitted, would decrease incentives to participate in and rely on standard-setting bodies and activities.[29] The harm to the competitive process flows accordingly out of the distortion of a precompetitive institution. At the very least it can be read as resolving the issue by placing an almost insuperable burden of proof on the defendant to establish redeeming precompetitive virtues of its conduct.[30]

Both the FTC and the Third Circuit purport to apply the net consumer welfare test that dictates a balancing of pre- and anticompetitive effects. In practice however they did not perform such a balance because they find patent ambush anticompetitive and without any precompetitive virtue. It could be argued that the reason for applying this test is that courts consider there is not enough experience with such unilateral action in competition so as to formulate a more concrete legal test. In any event, both decisions do not explicitly balance the interest of Rambus as inventor of the DRAM memory.[31] While the FTC did not hesitate to recognize that trade secrecy should always be scaled back for the sake of building trust for participation in SSOs,[32] it did not make any such statement for the interests of the

27 *Id.* at 313.

28 *Id.* at 314.

29 *In the Matter of Rambus, Inc., supra* note 3, at 70.

30 *Id.* 68–71.

31 Drexl, "Deceptive Conduct in the Patent World – A Case for US Antitrust and EU Competition Law?", in: Prinz zu Waldeck und Pyrmont, Adelmann, Brauneis, Drexl & Nack (eds.), "Patents and Technological Progress in a Globalized World (Liber Amicorum Joseph Straus)" 152–153 (2008).

32 *In the Matter of Rambus, Inc., supra* note 3, at 31.



inventor, who has contributed to society by disclosing his invention. This is a first indicator that antitrust law is not the appropriate means to legally assess patent ambush, as this is an issue of patent scope.

The analysis of the FTC and the Third Circuit in denying patent ambush any precompetitive virtue comes close to creating a new concept of competitive injury, namely the subversion and undermination of the standardization process.

**B. Patent Ambush as Non-Exclusionary Price-Increasing Deception**

The D.C. Circuit rejected these theories of antitrust liability in its appellate decision on *Rambus*.[33] In contrast to the FTC and the Third Circuit it did not considered the conduct at issue in the context of standard development and argued in an abstract manner. It rather subsumed patent ambush within the broader category of price-increasing deception performed by a lawful monopolist.[34] The latter cannot sustain its prices for long at a supra-competitive level. If it does so, this would attract competitors whose entry into the market would drive prices down towards marginal cost. Monopoly pricing is further seen as a concomitant of the mere existence of monopoly power, which is itself a characteristic of dynamic competition promoted by antitrust legislation. Antitrust interference with monopolist's pricing policy is to be avoided because the risk of false positives is great.

The syllogism of the D.C. Circuit seems to be based on the additional premise that business torts cannot lead to antitrust remedies. The doctrine of antitrust injury serves exactly the purpose of allowing advancement in competition at the expense of competitors so as to maintain intense competitive rivalry in the market. Accordingly, harm to competitors would not suffice for a monopolization claim unless the competitive process is harmed. The requirement of antitrust injury is again a manifestation of the need to avoid over-deterrence of precompetitive exclusion. JEDEC participants lost at most an opportunity to negotiate ex ante FRAND terms and were to this extent hampered by the actions of Rambus. According to the D.C. Circuit there was no harm to the competitive process because Rambus was still facing competitive pressure from alternative technologies. Whereas it remained unclear whether an unfair competition cause of action would have been successful, the Court opined that a monopolization claim does not come into play in any event. Implicit in its argumentation is equally the notion that patents do not guarantee their owners a monopoly in an economic sense.[35] In addition, by referring to the conduct of a "lawful monopolist", which is in principle privileged by antitrust laws, the court seems to suggest that the monopoly power enjoyed by Rambus is simply the result of

33 *Rambus, Inc. v. FTC, supra* note 2.

34 *Id.* at 464–465.

35 U.S. DoJ & FTC, "Antitrust Guidelines for the Licensing of Intellectual Property", 2.2 (1995).

its patent. Although the court does not expressly address the patent/antitrust interface, following its logic could lead to the conclusion that the outcome was also influenced by the notion that antitrust interference with the exercise of the patentee's rights should be kept to a minimum so as to avoid a dilution of the regulation of innovation that takes place within the patent system.[36]

The starting point of criticizing the decision of the D.C. Circuit is its failure to examine the practices of Rambus in the context of the competitive environment in which they occur. The classification of competitive strategies in the pre- or the anticompetitive category cannot be successfully effectuated unless it is context-related.[37] When it comes to private business arrangements in general and unilateral actions such as monopoly pricing, price discrimination or even deception specifically, antitrust enforcement is indeed highly likely to lead to over-deterrence. However, the same competitive strategies entail risks of under-deterring anticompetitive conduct if evaluated in the context of standard-setting activity. Letting the ambusher escape antitrust liability threatens to put standardization and its efficiencies aside or to erode the commercial success of the ultimate standard by the imposition of high commercialization costs. Price discrimination such as that exercised by Qualcomm restricts the number of participants and consequently reduces the innovative effort within the standard. In the light of the anticompetitive effects of patent deception within the SSOs analyzed above, the proposition that the requirement of antitrust injury requires a total eclipse of competition becomes indeed arguable.

Another avenue to evaluate the decision of the D.C. Circuit is to examine its reliance on the Supreme Court's *Nynex Corp. v. Discon* decision.[38] *Nynex* was a case involving a concerted refusal to deal in the market for removal and salvage of obsolete telephony equipment. This market was created after the divestiture measures taken against the AT&T monopoly in the local telephone service business. The emerging companies had to replace their call-switching equipment in order to make it possible for all companies offering long-distance services to have access to their customers. This would assure that the long-distance service would remain competitive.

36 *See also* DoJ, Press Release of 17 September 2007, "Assistant Attorney General for Antitrust, Thomas O. Barnett, Issues Statement on European *Microsoft* Decision", http://www.usdoj.gov/atr/public/press_releases/2007/226070.htm. This already indicates the insufficiency of antitrust analysis to deal with the "hold up of standards" problem. *See* LEMLEY, "Ten Things to Do About Patent Holdup of Standards (and One Not to)", 48 B.C.L. Rev. 149, 167–168 (2007); HOVENKAMP, "Standards Ownership and Competition Policy", 48 B.C.L. Rev. 87, 105 (2007).

37 *See* for example the remark of J. GINSBURG in: *Caribbean broadcasting System, Ltd. V. Cable & Wireless P.L.C.*, 148 F.3d 1080, 1087 (C.A.D.C. 1998) "Anticompetitive conduct can come in too many different forms and is *too dependent upon context* for any court or commentator ever to have enumerates all of the varieties."

38 *Nynex Corp. v. Discon, supra* note 8.



Nynex was a telephone service provider and a regulated monopoly in the geographic area of New York. It bought removal services from Discon but later on switched to AT&T Technologies (an AT&T affiliate) after the latter agreed to participate in a fraudulent scheme that aimed to inflate the rates paid by its customers. Nynex would buy removal services exclusively from AT&T Technologies bypassing and essentially excluding Discon from the market. It would further pay inflated rates for the removal service, which would be then passed on to consumers. Nynex would receive a secret year-end rebate in return. The Supreme Court had to decide whether this amounted to a conspiracy to exclude Discon by defrauding both the regulatory agency in its oversight of the rate-setting process and ultimately consumers.

The first issue addressed by the Court was whether the per se rule prohibiting horizontal group boycotts was equally applicable when the concerted refusal to deal is being effectuated by undertakings in vertical relationship. The Court denied to apply the per se rule in vertical boycotts because such case law would discourage firms from changing suppliers even in cases where the competitive process itself suffers no harm.[39] Moreover, the harm to consumers was caused by the exercise of monopoly power that was lawfully acquired by Nynex. This also excluded liability under Sec. 2. The Supreme Court explained the result by stating that the transformation of all cases involving aggressive business behavior to treble-damage antitrust cases would lead to inefficient over-deterrence.[40] The core statement of the Court turned out to be that antitrust is not the proper legal instrument to deal with the case before it and considered that the proper legal assessment lies outside the scope of the antitrust laws.

In view of the above it should be examined whether the reliance of the D.C. Circuit on *Nynex* was justified. According to the court *Rambus* bears a clear analogy to *Nynex* because both cases deal with a lawful monopolist's effort to increase revenue by deception.[41] This argument has been criticized on the ground that penalizing Nynex for its fraudulent scheme generates false positives whereas letting Rambus escape antitrust liability for its deceptive conduct would create – as mentioned above – false negatives.[42] The analogy to the *Nynex* precedent is however to be traced in the notion that where the competitive process is not disabled, antitrust is not the proper set of norms to legally assess firm behavior in view of its grave deterrent effect and the

39 *Id.* 137.

40 *Id.* 137.

41 *Rambus, Inc. v. FTC, supra* note 2 at 464–465.

42 COTTER, "Patent Hold Up, Patent Remedies and Antitrust Responses", University of Minnesota Law School, Legal Studies Research Paper, Research Paper No. 08-39 available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1273293. That false negatives are present in the case of patent ambush can also be seen by the fact that the FTC held the profit-sacrifice test as impertinent for such a set of facts, *see* FTC *In the Matter of Rambus, Inc.*, *supra* note 3, at 30–31.

administrative costs. If *Rambus* is read as stating that in the absence of harm to the process of competition antitrust should not intervene and a solution must be sought to other norms that regulate competition, then the reasoning of the D.C. Circuit is correct.

### C. The Causation Argument of the D.C. Circuit

The existence of a causal link between the allegedly exclusionary conduct of patent ambush and the acquisition of monopoly power was denied by the appellate court in *Rambus*.[43] The adoption of the standard by the SSO was simply one link in the causal chain, since the creation of market power was equally dependent upon a wide acceptance of the standard in the marketplace. The Commission's finding was that the market would have, with the greatest probability, gravitated around a single standard given that the compatibility and interoperability of DRAM memory with other components in the same computer system was indispensable. In the absence of deceptive patent ambushing, JEDEC would either have excluded Rambus's patented technologies from its standard or demanded RAND assurances from the outset of the standardization process. The decision of the Commission leaves the possibility open that Rambus's technologies might have been standardized even if JEDEC was fully aware of the patent situation. In other words the deceptive conduct of Rambus was not a *sine qua non* condition for the incorporation of its patents into the standard and the acquisition of monopoly power. The D.C. Circuit negated for this reason the existence of a causal link between the allegedly exclusionary conduct and the achievement of monopoly power. In this respect it departed from its previous ruling in *Microsoft*, where it held that it suffices for establishing causation, if the plaintiff shows that the defendant's actions appear reasonably capable of making a significant contribution to the acquisition or maintenance of monopoly power. It was thus not necessary for the plaintiff to reconstruct the hypothetical marketplace and show Netscape Navigator and Java would have indeed survived competition in the absence of Microsoft's exclusionary practices.[44] The "but-for" test applied by the D.C. Circuit in its causation analysis is not satisfactory because it is under-inclusive. Its inadequacy is evident in cases of over-determined causation, where more factors would have been independently sufficient to produce harm, so that none of them amounts for a condition precedent for the antitrust injury.[45] Excluding the non-necessary conditions for achievement of monopoly power from the reach of antitrust law would prohibit intervention against serious anticompetitive threats and invite undertakings to do their part in market evolutions that lead to harmful

43 *Rambus, Inc. v. FTC*, *supra* note 2, at 466–467.

44 *U.S. v. Microsoft Corp.*, 253 F.3d 34, 79 ( D.C. Cir. 2001).

45 For an in-depth critique of the appropriateness of the "but for" test for conducting the causal inquiry in tort liability analysis *see* Wright, "Causation in Tort Law", 73 Cal. L. Rev. 1735, 1775 (1985) *et seq.*



monopolization.[46] It is indeed difficult to argue that acquisition of market power through misrepresentation and concealment of patent-related pursuits in the context of standard setting does not deserve the scrutiny of antitrust law at all. In the realm of antitrust, causation analysis should consequently be driven by functional considerations.[47]

The causation analysis of the D.C. Circuit is undoubtedly problematic.[48] Its ruling on the merits of the monopolization claim may be unsatisfactory in terms of economic public policy but right in terms of antitrust doctrine.[49] The decision should not be seen however as an approbation of patent ambushing, but rather, as the reliance on *Nynex* suggests, as a relegation of the matter to other sets of norms and a call to examine the same set of facts in view of protection interests other than those protected by antitrust laws. It is noteworthy that the language used by the D.C. Circuit in its administration of the antitrust injury requirement does not contain policy considerations regarding standard setting on the basis of which the arguments of Rambus should be dismissed. The court rules basically on antitrust inapplicability.

## *IV. The Unfair Competition Powers of the FTC*

The unfair competition cause of action might be more adequate than antitrust in dealing with patent ambush. It is the discipline that protects businesses against tortious harm caused by competitors. It not only concerns exploitative deception. While participants in SSOs agree to forego competing in certain manners such as using different technologies, competitive rivalry among them is taken to another level as each member strives to have his technology standardized.[50] The legal problem emerging is consequently

46 "[... N]o government seriously concerned about the evil of monopoly would condition its intervention solely on a clear and genuine chain of causation from an exclusionary act to the presence of monopoly." Areeda & Hovenkamp, *supra* note 5, Sec. 651(f) at 83, 84, (2nd ed. 2002).

47 For the functional approach in causation analysis *see* generally Calabresi, "Concerning Cause and the Law of Torts", 43 U. Chi. L. Rev. 69 (1975).

48 Rosch, "Section 2 and Standard Setting: *Rambus*, *N-Data* & the Role of Causation", at LSI 4th Antitrust Conference on Standard Setting & Patent Pools (2 October 2008), at 10, available at http://www.ftc.gov/speeches/rosch/081002section2rambusndata.pdf.; Wallace, "*Rambus v. F.T.C.* in the Context of Standard-Setting Organizations, Antitrust, and the Patent Hold-Up Problem", Berkeley Tech. L.J. (forthcoming), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1364116#.

49 *Cf.* Areeda & Hovenkamp, *supra* note 5 (3rd ed. 2008), § 712(d) at 369; Hovenkamp, "Patent Continuations, Patent Deception and Standard Setting: The *Rambus* and *Broadcom* Decisions", University of Iowa Legal Studies Research Paper, No. 08-25 June 2008, at 28, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1138002.

50 Shapiro & Varian, "Information Rules: A Strategic Guide to the Network Economy", (1999), at 227–259. De Lacey, Herman, Kiron & Lerner, "Strategic Behavior in Standard-Setting Organizations", Harvard NOM Working Paper No. 903214, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=903214.

whether deceptive concealment of patent interests so as to win the race for property rights on the ultimate standard and exploit co-participants with exorbitant royalties amounts to a competitive tort.

A preliminary question arises here with regard to the applicability of the unfair competition cause of action to the exercise of intellectual property rights. Unfair competition laws constitute a relationship mechanism of common law legal regulation.[51] Rights and duties are pursuant to this mode of thought automatically assigned to individuals as a legal consequence of the fact that they are parties to a legally recognized relationship. Just as between principal and agent, landlord and tenant, or debtor and creditor there are specific duties arising for the parties to a competitive relationship.[52] With regard to its position in the system of torts, unfair competition belongs therefore to the kind of torts that impose duties on persons in particular situations to persons in similar situations.[53] To the extent that duties of "fairness" are inflicted on a patent holder as a participant in a group competitive relationship, the exercise of its exclusive rights can accordingly be restricted.[54]

### A. Patent Ambush: A Newborn Subspecies of the Common Law Tort of Unfair Competition?

Section 5 of the Federal Trade Commission Act declares unfair methods of competition and unfair or deceptive acts or practices unlawful at a federal level. The demarcation of the jurisdiction of the FTC through the common law concept of unfairness means that the Commission has, at least in theory, the authority to prohibit conduct that is not penalized by antitrust laws.[55] Both courts and the Commission itself interpret Sec. 5 narrowly as conferring limited "unfairness powers" to the FTC. Behind this view is the notion that it is antitrust law that sets the amount of competitive rivalry necessary to bring about the results of effective competition. Disallowing business

51 CALLMANN & ALTMAN, "Unfair Competition, Trademarks and Monopolies", (Supp. 2009), Sec. 1:14.

52 *Id.*

53 *Id.* Following the categorization of torts by HOLMES, "The Theory of Torts", 44 Harv. L. Rev. 773, 784 (1931).

54 CALLMANN & ALTMAN, *supra* note 51, at Sec. 4:58.

55 "[They may consider] public values beyond simply those enshrined in the letter or encompassed in the spirit of the antitrust laws [when it measures] a practice against the elusive, but congressionally mandated standard of fairness." *F.T.C. v. Sperry & Hutchinson Co.*, 405 U.S. 233, 240, 244 (1972). "The Commission has described the factors it considers in determining whether a practice that is neither in violation of the antitrust laws nor deceptive is nonetheless unfair: (1) whether the practice, without necessarily having been previously considered unlawful, offends public policy as it has been established by statutes, the common law, or otherwise – whether, in other words, it is within at least the penumbra of some common law, statutory, or other established concept of unfairness; (2) whether it is immoral, unethical, oppressive, or unscrupulous; (3) whether it causes substantial injury to consumers (or competitors or other businessmen)." *Id.* at 244.



practices that antitrust laws do not denounce reduces the optimal amount of competitive rivalry. This section examines scope of the legal notion of unfairness as a touchstone of competitive tort liability designed to implement regulation of competition below the threshold of competition injury.

#### 1) The Doctrine of Prima Facie Tort

In a nutshell, the doctrine of prima facie tort dictates that intentionally inflicting injury on a third party is tortious behavior unless there is a justification for such harm. The justifiability of the defendant's conduct is furthermore appreciated in the light of general public interests. Despite the fact that it had, to a great extent, served as an instrument of fighting malevolence not captured by nominate torts,[56] the element of intentional damage was reduced in the course of its development so that it would suffice for a prima facie tort if the alleged tortfeasor consciously committed actions that are pertinent to damage another. The essence of the prima facie tort doctrine lies thus in the justification element.[57] In other words there is a rule of thumb that provides: if the furtherance of an individual interest through the damage of another serves a superior social interest, then the defendant should escape liability.[58] Tortious liability is therefore assigned not only with the purpose of the plaintiff's indemnification but in view of wider public interests. An illustrious example can be found in one of the first English precedents that established the doctrine in the Anglo-American legal system.[59] In order to exclude competitors from trade with China, British ship owners engaged in various activities such as loyalty rebate schemes and predatory pricing. The House of Lords had to balance conflicting interests in the light of the public interest of the advancement of overseas trade. The interest of the defendants to secure their own advantage by endangering that of their competitors was given prominence over a plaintiff's interest to be protected in the legitimate exercise of his trade so as to promote a desirable social result like the maintenance of incentives to overseas trade. At this point there is no need to take a stance on the theoretical dispute whether the general rule is liability for harm and recognition of exemptions based on definite grounds, as the prima facie tort doctrine suggests, or whether the law prescribes liability grounds by way of exemption.[60] Both theories can coexist harmoniously in the legal order. The second theory controls the application of contemporary law by revealing the available grounds for liability, the nominate torts. It assists the legal profession.[61] The utility of the prima facie tort doctrine and especially of its justification element is to

56 HOLMES, "Privilege Malice and Intent", 8 Harv. L. Rev. 1, 9 (1894).

57 NOTE, "The Prima Facie Tort Doctrine", 52 Colum. L. Rev. 503, 505–509 (1952).

58 PROSSER, "Law of Torts", Sec. 3 (3rd ed. 1964); WINFIELD, "On Tort" 14–20 (6th ed. 1954).

59 *Mogul Steamship Co. v. McGregor, GOW & Co.*, LR 23 Q.B.D. 598 (1889), affirmed (1892) A.C. 25.

60 HEUSTON, "Salmond on Torts", Sec. 4, 18–21 (14th ed. 1965).

61 ROGERS, "Winfield and Jolowicz on Tort" 13–15 (13th ed. 1989).

generate causes of action arising in tort by taking account of the interests of the parties involved and those of the public in general. It blazes the trail for the development of tort law.[62]

2) The Prima Facie Tort Doctrine as a Touchstone of Unfair Competition Law Liability

When regulating competitive conduct the doctrine privileges as a rule practices that are designed to harm competitors (the competitive privilege).[63] These are justified by the prevailing social interest of maintaining a competitive economy, which is based on fierce rivalry among competing undertakings.[64] The unfair competition cause of action comes into play when rivalry between competitors becomes excessive to the extent that it no longer serves an effective competition process. The regulation of such rivalry excesses is exactly the field that antitrust leaves unattended to fall within the realm of unfair competition law.[65] While antitrust law safeguards the process of competition to the benefit of the consumer, the creation of new unfair competition causes of action via the prima facie theory is a form of regulation of competitive conduct to ensure the effectiveness of the competitive process.[66] The unfair competition doctrine sets the "rules of the game" where this is necessary in order to reach efficient outcomes. An example would be the tort of passing off. Misrepresentation with regard to the source of goods is not an antitrust offence. The prohibition of passing off is *inter alia* based on the proprietary concept of goodwill. Allowing goodwill misappropriation through trade diversion would not harm the competitive process, but it would undermine the effectiveness of competition by reducing the incentives to maintain high product quality.

62 *Id.*

63 For details on the prima facie tort doctrine as the basis for unfair competition law liability *see* OPPENHEIM, "Unfair Trade Practices and Trade Regulation", (1950), at 42 *et seq.*; *See also* the wording of Sec. 1 of the Restatement (Third) Of Unfair Competition (1993) under Chapter One entitled "Freedom to Compete": "One who causes harm to the commercial relations of another by engaging in a business or trade is not subject to liability to the other for such harm unless: (...)." *See also* Restatement (Second) Of Torts Sec. 768 (1977), where competition is treated under certain qualification as a justification for interfering with the business relations of another.

64 The prima facie theory has been criticized because it puts the burden of the justification on the defendant. The Restatement (Third) of Unfair Competition places, as a rule, in Sec. 1 the burden to prove that a defendant's conduct is not privileged competition upon the plaintiff. CALLMANN, in "What Is Unfair Competition?", 28 Geo. L.J. 585, 589 *et seq.* (1940) has also pointed out that it is based on the false premise that overpowering competitors is prima facie tortious. This was not in accordance with his perception of unfair competition as an order of struggle. In any event, the utility of the prima facie tort doctrine in the field of unfair competition is not the allocation of the burden of proof but its accessory role in the generation of new unfair competition causes of action by calling for a balance between the utility of injurious conduct against the utility of the interest invaded, where the utility relates to the effectiveness of competition.

65 MCCARTHY, "McCarthy On Trademarks and Unfair Competition", Sec 1:22 (Supp. 2008).

66 *Id.*



The main criticism of the prima facie theory has been that it describes a legal method in general but does not provide any material guidance on how to administer the justification element. Thus, it makes the common law judge responsible for making competition policy.[67] Such a concern is no longer valid, since the regulation of competition through the unfair competition cause of action is, at a federal level, entrusted to the FTC, which enjoys, within the limits of the congressionally-mandated common law concept of unfairness, some level of discretion in order to make competition policy below the threshold of harm to the competitive process.[68] In cases where regulation of competition is necessary, the antitrust requirement of harm to the competitive process cannot preempt the application of unfair competition law. The unfair competition theory might therefore suggest that even if patent ambush does not amount to an antitrust offense, it would be necessary to regulate competitive conduct in the context of standard-setting activity in order to ensure the effectiveness of competition.

3) Deceptive Use of the Patent System as a Competitive Tort

The FTC has indeed developed a Sec. 5 theory covering the fact pattern analyzed here. It filed a complaint against Dell, who took part in the proceedings of the Video Electronic Standards Association (VESA) and certified that the bus design standard[69] adopted would not infringe any of its patents.[70] After the implementation of the standard Dell asserted patent claims over it. Having analyzed the perniciousness of patent ambush for standard setting activity, the FTC forbade Dell to enforce its patents on a Sec. 5 liability theory that prohibits the intentional abuse of the standards process.[71] Liability does not attach to inadvertent failure of disclosing intellectual property rights. In this way the legal test is ameliorated so as to take account of the interests of right holders by ascertaining that they would in

67 OPPENHEIM, *supra* note 63, at 49. Contra WIED, "Patently Unfair: State Unfair Competition Laws and Patent Enforcement", 12 Harv. J.L. Tech. 469 (1999), who suggests application of Sate unfair competition laws in cases involving the assertion of patent rights.

68 *Cf.* HOVENKAMP, "Federal Antitrust Policy, The Law of Competition and its Practice", (2005), Sec. 15.2 at 597, where he recognizes that the FTC, in view of the fact that its findings of Sec. 5 violations do not support subsequent private actions for treble damages, has authority to identify practices that are economically anticompetitive even if they are technically not covered by the Sherman Act provided that their prohibition does not entail significant error costs. MURIS, "Looking Forward: The Federal Trade Commission and the Future Development of U.S. Competition Policy", 2003 Colum. Bus. L. Rev. 359, 399–406, 386–391 (2003); CALKINS, "The Legal Foundation of the Commission's Use of Section 5 to Challenge Invitations to Collude is Secure", 14 Antitr. 69, 78 (2000); *See also In re Negotiated Data Solutions, LLC*, Docket No. 051-0094 (2007), at 7–8, available at http://www.ftc.gov/os/caselist/0510094/index.shtm.

69 A mechanism for transferring instructions between a computer's central processing unit and its peripherals.

70 *In the Matter of Dell Computer Corporation*, Docket No. C-3658, 121 F.T.C. 616 (1996).

71 *Id.* at 618.

any event be aware of the qualification of their rights of exclusion. The FTC invoked the same line of reasoning in the *Unocal* case.

The Sec. 5 theory promulgated by the FTC declares the intentional abuse of the standard process as an act of unfair competition. Deception as such is for this theory a secondary issue in the sense that it matters only as long it subverts or undermines the standardization process. This is evident in the ruling of the FTC in *N-Data*.[72] There, a member of a working group of the National Semiconductor Corporation that was developing a standard for East Ethernet agreed to license its technology for a specific fee to any manufacturer implementing the ultimate standard. After having entered into this commitment it transferred its patent rights to a third party. The new owner of the patent demanded royalties maximizing his profit at a time where the standard had already been implemented. Despite the fact that there was no deception by the patentee so as to have its technology standardized, the FTC considered the assertion of patent rights under such circumstances as an act of unfair competition because it was undermining and subverting standard setting activity.

The arguments of the FTC basically support the view that there is no justification serving superior social interests for the conduct of the ambusher and thus its conduct can be qualified as a competitive tort under the prima facie liability theory of unfair competition.

### B. The Application of Consumer Protection Principles

The elements of deceptive conduct actionable under Sec. 5 of the FTC Act are set out in the Commission's Policy Statement on Deception.[73] These principles are valid not only in the context of the protection of the unsophisticated consumer but are also applicable by analogy to other economic operators because efficiency can only be achieved through informed economic decisions.[74] Accordingly, the FTC has jurisdiction to take action against deception when the misrepresentation is "material" in the sense that "it is likely to mislead others acting reasonably under the circumstances and thereby likely to affect their conduct or decisions."[75] The crux of the matter ultimately becomes whether the allegedly deceiving action is surmountable or not.

Misleading advertising statements, for example, would not be taken to be deceptive if they are transparent to rivals that can protect themselves by engaging in counter-advertising of their own. The situation is different with

72 *In re Negotiated Data Solutions LLC, supra* note 68 at 7–8.

73 Federal Trade Commission, "Policy Statement on Deception", appended to *Cliffdale Associates, Inc.*, 103 F.T.C. 110, 174 (1984), http://www.ftc.gov/bcp/policystmt/ad-decept.htm.

74 For this line of reasoning *see* the Final Brief for Respondent Federal Trade Commission on the Court of Appeals, 2008 WL 144939, at 36 *et seq*.

75 *Id.* at 37.



regard to participants in SSOs.[76] Contrary to their legitimate expectations of candor and cooperation they find themselves trapped in a lock-in situation and defenseless against the exploitative strategies of the ambusher.

Although the Commission handled the case as one of monopolization, it suggested that the conduct of Rambus could be prosecuted on the basis of a deception claim pursuant Sec. 5 of the FTC Act alone.[77]

## V. *The Necessity to Search for a Solution in Patent Laws*

### A. The Insufficiency of Antitrust and Unfair Competition Analysis

Antitrust and unfair competition law cannot provide the suitable legal consequence that would deter patent ambush and guarantee that SSOs would have the opportunity to reach the most efficient outcome possible. Even if the FTC analysis would be considered as the correct one, the remedial restoration of competition in the majority of the cases of patent ambush would be to compel the ambusher to license on reasonable terms. This would encourage patent holders to engage in attempts at capturing industry standards by patent continuation claims, since they do not have anything to lose. In the worst-case scenario they will be able to charge reasonable royalties in a very large market. In addition, the best antitrust outcome would still lead to the inefficiencies described above when the standard setting process is meant to culminate in an open industry standard. The remedy that can effectively discourage patent holders from becoming ambushers is the unenforceability of the patent against any infringer. This can be found in patent law and more specifically in the patent misuse doctrine. Furthermore, the stringency of the remedy counterbalances the potential lack of power of SSOs to enforce policies that make provision for disclosure duties of patent interests.

It could be argued that a different interpretation of the doctrine of competition injury is possible.[78] The succession of monopolists taking place in Schumpeterean competition is not apt to bring welfare-maximizing results in high-tech industries and especially in situations of standardization. The requirement of establishing harm to the competitive process would accordingly be interpreted not as protecting competition as an end in itself but by considering that it is effective competition that is protected. The D.C. Circuit's application of the doctrine can be also criticized from another standpoint. Requiring harm to the competitive process in order to sustain an antitrust claim has a double doctrinal function. The antitrust injury requirement raises the principle that competition is the most efficient economic order, but it is also invoked by courts to dismiss bogus claims where the

76 *Id.* at 40.

77 *In the Matter of Rambus, Inc., supra* note 3, at 30 and fn. 141.

78 Houck, "Injury to Competition/Consumers in High Tech Cases", 75 St. John's L. Rev. 593, 614 (2001).

plaintiff simply seeks to recover for damage suffered in its course of business and the anticompetitive effect is not easily visible in defendant's acts[79] or the harm to consumers is likely to be overcompensated in the long run. One could speculate that this antitrust litigation pattern repeated itself when *Rambus* reached the D.C. Circuit. *Rambus* was not the case of a claimant who is non-meritorious of protection though.

**B. The Pertinence of the Misuse Theory**

1) General

Even in this case antitrust is not best solution to deal with standardization problems. The remedy of unenforceability guarantees quick access to the standard, not only for the parties that were deceived and suffered antitrust injury but also for other industry actors that do not fulfill the antitrust standing requirement. Access to the standard remains undistorted because the parties wishing to join do not hesitate in the fear of engaging themselves in lengthy antitrust litigation. They can simply infringe and put forward a misuse defense if sued. The misuse doctrine has standing requirements that serve the purposes of effective competition in the standardization context better than those of antitrust. Another issue is the deference that antitrust law must show to substantive patent law valuations.[80] If the patent system allows continuations and divisionals so as to allow the patentee to capture the full value of its inventive effort, antitrust law cannot negate such policy decision of the patent act.[81]

Patent remedies are, in any event, more effective because they can stop the ambusher before it manages to impermissibly expand the economic gravity of its patent. Because even if the ambusher is restricted to reasonable royalties, it still retains a benefit from its deceptive conduct as it can still exploit the network effects arising from standardization although the market has enlarged for reasons not attributable to its inventive contribution. For similar reasons other possible doctrinal solutions are unsatisfactory.

2) Compared to Denial of Permanent Injunction Pursuant Section 283 Patent Act

Denying the ambusher permanent injunctive relief pursuant to Sec. 283 Patent Act[82] considering the hardships faced by undertakings that have

79 DAVIS, "Standing on Shaky Ground: The Strangely Elusive Doctrine of Antitrust Injury", 70 Antitrust L.J. 697, 775 (2003); SNYDER & KAUPER, "Misuse of the Antitrust Laws: The Competitor Plaintiff", 90 Mich. L. Rev. 551, 576 *et seq.* (1992).

80 DREXL, *supra* note 31, at 152–153.

81 HOVENKAMP, *supra* note 49, at 28–30.

82 *See eBay Inc. v. Merc Exchange LLC*, 547 U.S. 388 (2006). A unanimous Court held that plaintiffs succeeding in patent infringement suits are not automatically entitled to a permanent injunction, and injunctive relief requires the fulfillment of the traditional four-factor test namely the showing of: (a) irreparable injury, (b) inadequacy of remedies at law, (c) the balance of hardships favors an injunction, and (d) the public interest would not be

(Contd. on page 801)



irreversibly invested in the standard does not resolve the problem of corruption of the standard setting process. First of all, contrary to constellations of holding-up the commercialization of a complex product or excluding noncompetitors from practicing the patented invention, the market power of the ambusher does not result from the threat of an injunction but from the lock-in situation created by its deceptive actions. The patentee is also not interested in refusing to license. It is rather eager to exploit a market characterized by network effects based on its invention. Disallowing the automatic injunction upon finding of infringement does not prevent the patentee from distorting standardization.

3) Compared to Contractual Remedies

Contractual enforcement of SSO policies stipulating disclosure obligations regarding patent interests on technologies considered for standardization is, on the other hand, not possible for third parties who are willing to join the standard, because they are usually not intended – at least by the patentee – to be beneficiaries of the contract.[83] The right of a third party to sue in order to enforce an SSO IP policy could be grounded on the protection of a reliance interest under the contractual doctrine of promissory estoppel. This requires proof that: (a) there was indeed reliance by a third party on the patentee's contractual promise to license within the SSO and (b) that the promissor was aware of the fact that the third party was expecting to benefit from such promise.[84] Contract law remedies are therefore deficient in deterring patent ambush and widen the access to the standard because they are only available to a restricted number of claimants.[85]

4) Compared to the Principle of Equitable Estoppel

Patent ambush could also be remedied by an application of the doctrine of equitable estoppel. The defense of infringement is successful when the mis-

(Contd. from page 800)

disserved by an injunction. In the aftermath of *eBay*, case law recognizes that permanent injunction would attach where: (a) the patentee and the infringer are direct competitors, (b) the plaintiff is of institutional status (e.g. institution), and (c) where the contribution of the patented invention to the product of the infringer is significant. CHAO, "After *eBay, Inc. v. MercExchange*: The Changing Landscape for Patent Remedies", 9 Minn. J.L. Sci. & Tech. 543, 549 *et seq.* (2008).

83 LEMLEY, *supra* note 19, at 1915.

84 *Id.* 1915–1918.

85 Fraud is a *maiori ad minus* not the appropriate legal rule. Due to its high standard proof requirements it is not apt to protect even the reliance interests of all those who had direct communication with the ambusher. "To prove fraud [...] a party must show by clear and convincing evidence: 1) a false representation (or omission in the face of a duty to disclose) 2) of a material fact 3) made intentionally and knowingly 4) with the intent to mislead 5) with reasonable reliance by the misled party and 6) resulting in damages to the misled party. [...] A party's silence of withholding of information does not constitute fraud in the absence of a duty to disclose that information." *Rambus Inc., v. Infineon Technologies AG*, 318 F.3d 1081, 1096 (Fed.Cir. 2003).

leading conduct of the patentee leads an alleged infringer to reasonably infer that the patent would not be enforced. Also required is a showing that reliance on the misrepresentation was reasonable and detrimental. The bar to enforcement is indeed a doctrinal feature that serves the legal implementation of policy considerations against patent ambushing. But just like contractual remedies, equitable estoppel cannot come to the rescue of all entities worthy of protection because it requires a privity relationship of the patentee to each individual infringer.[86]

Merges and Kuhn[87] propose to plug this doctrinal loophole by recognizing a gradually developing reliance interest of industry members as they proceed to invest in a standard, which is derived from the patentee's non-disclosure or willful enforcement inertia. In our view there is no need to conceptually stretch the doctrine of equitable estoppel since the misuse theory of the patent can squarely address patent ambushing in standards. The "standards estoppel" doctrine is actually intended to foster the efficiency-enhancing effect of standardization, but it relies heavily on the assumption that there is a reprehensible conduct by the patentee. In this respect, it is not a complete theory that seeks to make an assertion about the optimal scope of patent rights in markets characterized by network externalities. The misuse theory can instead effectively cope with patent ambushing and simultaneously establish the incentives paradigm as the legal yardstick for assessing the desirable degree of patent protection in such markets. The particularities of network industries speak for special limitations of IP protection in this field.[88] The patent misuse doctrine guarantees the necessary doctrinal flexibility for ad hoc balancing of such interests and assessing future legal problems.

86 MUELLER, "Patenting Industry Standards", 34 J. Marshall L. Rev. 897, 924 (2001). The laches defense is for similar reasons no effective solution for dealing with strategic profit seeking in a network industry. MERGES & KUHN, "An Estoppel Doctrine for Patented Standards", 97 Cal. L. Rev. 1, 41–48 (2009).

87 *Id.*

88 *See* generally MACKENRODT, "Assessing the Effects of Intellectual Property Rights in Network Standards", in: DREXL (ed.), "Research Handbook on Intellectual Property and Competition Law" 80–107 (2008). This author makes the point that during the lock-in situation arising after the termination of the standard race, IPRs suppress static efficiencies in the form of scale economies and dynamic efficiencies in the form of follow-on innovations within the standard, while providing an incentive to innovate by overmastering the standard. In this way, he shows that the trade-offs between static and dynamic competition in network industries are different and more complex than in conventional markets. Static efficiency gains in importance in those industries because its promotion leads to lower prices and furtherance of the compatibility within the network. Inventive activity should, moreover, be focused on sequential innovation within the standard. These two factors speak for narrowing the patent scope. Acquiring patent rights on a standard confers significant market power on the patentee allowing him to exploit a large market. Such a reward should be kept for only extraordinary inventive performances, which in turn implies that the requirements for awarding patents in network industries should be tightened. He therefore shows that legal policy should be aimed at weakening IP protection in the context of standard setting.



5) Final Remark

That the topos of the legal problem examined here lies in patent law is also evident by additional factors. It is patent law that regulates the rent-seeking activity of the patentee so as to maintain a system of providing incentives for socially desirable innovation. In this manner patent law pays deference to the principle of free and effective competition in that it negates patent protection where it is not necessary.

## *VI. Patent Ambush as Patent Misuse*

### A. The Misuse Theory of Patent Law as a Manifestation of the Incentives Paradigm and its Substantive Law Elements

Defining the doctrine of patent misuse is not an easy task. Its doctrinal underpinnings, rationales and scope of application have been the subject of quite a few conflicting court opinions and academic commentaries. A first step to approach the doctrine conceptually is to see it as an implementation of the incentives paradigm in the field of patent enforcement. The incentives paradigm is a principle that pervades patent law and dictates that both the grant and the exploitation of patent rights are only permissible if they are either directed at or do indeed have the effect of producing incentives for innovative activity.[89] Furthermore, the system of incentives provided by patent laws does not aim to shift human behavior to innovative activity in general but to those forms of behavior that are socially desirable.[90]

The same concept demarcates the line between an exclusive right that promotes dynamic competition and an unnecessary restraint of trade.[91] Patent rights without welfare-increasing returns in the form of a technical contribu-

89 The "beyond the scope" rationale as a method of delineating the monopolistic effects of the patent is constitutionally mandated. The Intellectual Property Clause (Art. I, Sec. 8, Clause 8 of the United States Constitution) permits the award of exclusive rights in view of their social utility. *See also* STROHM, "Wettbewerbsbeschränkungen in Patentlizenzverträgen" (1971), at 61–62. For its influence on ECJ case law, *see* HEINEMANN, "Compulsory Licenses and Product Integration in European Competition Law – Assessment of the European Commission's *Microsoft* Decision", 36 IIC 63, 71 (2005).

90 The utility requirement set out in Sec. 101 Patent Act asks for the beneficial utility of the invention under consideration. Socially harmful inventions are not entitled to a patent. "All that the law requires is, that the invention should not be frivolous or injurious to the well being, good policy, or sound morals of society." *Lowell v. Lewis*, 15 F. Cas. 1018, 1019 (C.C.D. Mass. 1817) (No. 8568). *See also* MERGES, "Patent Law and Policy" 189 (2nd ed. 1992). An example of harmful innovation disapproved by the legal order is predatory innovation. *See* HOVENKAMP, JANIS & LEMLEY, "IP and Antitrust: An Analysis of Antitrust Principles Applied to Intellectual Property Law", Sec. 12.2 (Supp. 2008).

91 KAPLOW, "The Patent-Antitrust Intersection: A Reappraisal", 97 Harv. L. Rev. 1813, 1813–1820 (1984). His ratio test promulgated at 1821 *et seq.* seeks to maximize net social welfare by invalidating inefficient patent exploitation methods. Determining the optimal patent life is according to his view the core factor of such calculus. *See also U.S. v. General Electric Co.*, 272 U.S. 476, 489 (1926).

tion constitute undue restrictions of competition. The incentives paradigm serves therefore not only as the normative foundation of granting patents but also as an analytical tool for regulating the relationship between antitrust and patent law by adjusting the exclusionary effect of the patent. The aim is to confine the right holder to an appropriate reward for its inventive contribution because anything more would give rise to unjustified exercise of market power which would in turn amount to a social loss. In terms of methodology this goal is pursued either by somehow setting the level of market power that is permissibly exercised by the right holder or by defining the core and secondary markets where it is allowed to reap monopolistic benefits.[92, 93] The incentives paradigm cannot by itself guarantee a peaceful coexistence between IP and antitrust though. Its consequent application may lead to situations where the basic antitrust postulate of keeping markets open is nullified such as when IPRs cover a de facto standard.[94] According to another concept it is valid only as long as markets remain contestable.[95] In this regard the incentives paradigm needs to be supplemented by antitrust principles. On the other hand, it redresses social losses in the form of inefficiencies arising out of the exercise of market power not justified by welfare-increasing activity even if such losses do not amount to an antitrust injury in harming the competitive process. In this respect the incentives

92 For the various techniques of assuring that IPRs do not confer excessive market power to their owners *see* the contributions of DREXL, PATTERSON & SCHWEITZER, in: GOVAERE & ULLRICH (eds.) "Intellectual Property, Market Power and the Public Interest", (2008).

93 The issue of whether there are markets that should not be allocated by the legally recognized patent exclusivity could be depicted in the example of *In re Independent Service Organizations Antitrust Litigation (CSU, L.L.C. v. Xerox Corp.)*, 203 F.3d 1322 (Fed. Cir. 2000). Xerox's refusal to license patented parts was directed at excluding Independent Service Organizations (ISOs) from the service market of their products. Rejecting the finding of an antitrust violation the court held that it could do so because the patented articles fell under the right holder's exclusivity, at 1327–1328. This is a rather formalistic approach. A precompetitive reduction of the patent's scope would leave the service market open and confine the patentee to economic benefits strictly derived from its invention (selling high-volume copiers and their spare parts). Such restriction of the patent exclusivity would not decrease incentives to innovate those durable goods and their spare parts. *See* PATTERSON, "Intellectual Property and Sources of Market Power", *supra* note 92, at 58. As we further argue, the optimal scope of the patent is an issue of patent law and more specifically of the patent misuse doctrine that could be utilized to prevent such anticompetitive expansion of the exclusive right. The court disallowed the defense of patent misuse, at 1328, under the same justification with which it dismissed the antitrust claim, namely that the parts needed to compete in the service market were part of the patentee's right of exclusion. As we shall see this is a misunderstood attribution of the patent misuse theory to the inherency doctrine.

94 DREXL, "The Relationship Between Legal Exclusivity and Economic Market Power: Links and Limits", in: GOVAERE & ULLRICH (eds.), *supra* note 94, at 32.

95 HEINEMANN, "The Contestability of IP-Protected Markets", in: DREXL (ed.), *supra* note 88, at 54–77 addressing the contestability of the protected primary market but arguing that all other IP-related markets attributed to the patentee as reward for his inventive contribution should remain contestable as well.



paradigm complements antitrust law and constitutes a competition policy decision "in the spirit of antitrust."

The bottom line is that the incentives paradigm incorporates patent and competition policy under the rubric of public policy.

The incentives paradigm is brought to bear by specific doctrinal tools. The non-obviousness requirement is set to prevent the hampering of competition by the issuance of patents for inventions that are essentially in the public domain. In an attempt to exclude the possibility of awarding trivial patents, courts have applied the commercial success test as an indicator of non-obviousness. To give a more attentive consideration to competitive concerns it has been proposed to restrictively apply this test by placing on the patent applicant the burden to prove that the commercial success is directly derived from the invention claimed.[96] Similarly, when it comes to evaluating whether the prior art has already suggested the claimed invention (the "suggestion test") examiners are advised to assume that the person having an ordinary skill in the art is able to combine or modify prior art references.[97]

The patent misuse doctrine is in turn a manifestation of the incentives paradigm that covers the rent-seeking activity of the patentee. At the infringement stage the proprietary grant is reassessed for conformity with public policy in the aforementioned sense in view of its specific strategic use in competition.[98]

## B. The Birth of the Patent Misuse Doctrine

The substantive elements of the misuse theory are set out in its early founding precedents. Under consideration was the trade practice of patent holders to use their rights so as to establish themselves as the sole providers of goods destined to be used as replacement products in their "patented machines." The legal argument supporting competitive conduct of that kind was that the

96 FEDERAL TRADE COMMISSION, "To Promote Innovation: The Proper Balance of Competition and Patent Law and Policy", (2003), at 10, available at http://www.ftc.gov/os/2003/10/innovationrpt.pdf.

97 *Id.* at 11, 12.

98 "...[I]n whatever posture the issue [of the substantive law contours of the misuse doctrine] may be tendered courts of equity will withhold relief where the patentee and those claiming under him are using the patent privilege contrary to the public interest." *Mercoid. Corp. v. Mid-Continent Inv. Co. et al.*, 320 U.S. 661, 670 (1944). "It is a principle of general application that courts, and especially courts of equity, may appropriately withhold their aid where the plaintiff is using the right asserted contrary to the public interest." *Morton Salt Co. v. G.S. Suppinger, Co.* 314 U.S. 488, 492 (1942). "Courts [...] go much further both to give and withhold relief in furtherance of the public interest than they are accustomed to go when only private interests are involved." *Virginian Ry. Co. v. System Federation No. 40 et al.*, 300 U.S. 515, 552 (1937). "It is now well established that a patentee may not put his property in the patent to a use contra to the public interest. [... It] is not the private use but the public interest, which is dominant in the patent system." *Vitamin Technologists Inc. v. Wisconsin Alumni Research Foundation*, 146 F.3d 941, 944 (1945).

patentee, as the owner of the patent, has the right to set the conditions of third-party use of the invention at will. To achieve this aim, licensees were obliged to sell the machines manufactured under the patented process to consumers on the condition that they buy replacement products from the patentee either expressly or by affixing a relevant a notice on the machine (tying cases). Any third-party supplier of replacement products that came to threaten the integrity of such a commercial scheme was sued for contributively infringing the patent. The notorious cases that reached the Supreme Court concerned obligations to use motion picture projectors produced under a protected invention with films produced by the patentee[99] and a foodstuff preservation device implementing a patented technical rule with patentee's refrigeration element.[100] In another case[101] the patentee had not stipulated obligations of that kind but was seeking to achieve the same restriction on the use of the invention by suing traders who supplied a substance knowing it was going to be used in practicing the patented method for contributory patent infringement.

The suits were denied in all three cases. In *Motion Picture* the Court based its judgment on three rules applicable to the construction of patents and patent law in general:[102] (a) the scope of the patent is limited to the invention described in the claims; (b) patent law protection of inventors may not go beyond the securing of an exclusive right on the claimed invention; and (c) the utilitarian basis of patent rights implies that a patentee engaging in rent-seeking activity under its patent should confine itself to the revenue deriving from the demand created for the invention. In many parts of its opinion the Court put particular emphasis on the latter argument stating that the primary object in granting and securing the exclusive right was the public benefit in form of innovation and not the profitability of the patentee.[103] The Court therefore concluded that the plaintiff could not impose patent-related restrictions with regard to the films that were going to be used with its patented picture projectors because these films did not embody the protected invention and because the relief sought was outside the scope of patent law and contrary to its purposes. It is important to note that the three lines of legal argumentation are interrelated since the last one is a superordinate concept, but they remain distinguishable. The *ratio decidendi* of *Motion Picture* is consequently not solely based on the proper interpretation of the patent claims. After all, the Supreme Court applied the three principles

99 *Motion Picture Patents Company v. Universal Film Manufacturing Company*, 243 U.S. 502 (1917).

100 *Carbice Corporation of America v. American Patents Development Corporation et al.*, 283 U.S. 420 (1931).

101 *Leitch Manufacturing Co. v. Barber Co.*, 302 U.S. 458 (1938).

102 *Motion Picture Patents Company v. Universal Film Manufacturing Company*, *supra* note 99 at 510–511 (1917).

103 *Id.* "[T]he primary purpose of our patent laws is not the creation of private fortunes for the owners of patents, but is 'to promote the progress of science and the useful arts' (U.S. Constitution, Art. 1, the Section 8, Clause 8)."



cumulatively and did not, as it could have done, provide an answer to the legal question before it by simply identifying the subject matter of the patent. The main proposition is that the rent-seeking activity of the patentee is to be upheld by the patent laws only to the point that his returns accrue from demand generated for his invention. Any further benefit, like the one arising from the sale of input products, does not form part of the patent bargain and is in other words a loss for society without a service in return.

The use of the patent was found detrimental to the public interest from an additional point of view. The Court saw in the plaintiff's conduct an attempt to use his patent "as an instrument for restraining commerce" by means of "securing a limited monopoly over unpatented material."[104] The term "limited monopoly" means that the arrangements of the patent holder would allow it to control the part of the market for replacement products, that were to be used in operating the invention. A leveraging theory is ascribed to the opinion of Justice Brandeis, which plainly focuses on the foreclosure effects of tie-ins on the tied-product market.[105] Contemporary judges were actually sensing the anticompetitive potential of tying agreements but had no assistance from an economic theory that would point out the pro-competitive virtues of these agreements.[106] However, *Carbice* does not exclusively rest on the leveraging theory. This becomes clearer if the decision is read in light of the analytical framework of the relationship between patent and antitrust law that underlies it. The two areas of law were contemplated as opposing each other. Intellectual property rights formed exceptions to the principle of free competition and were accordingly defined as "legal monopolies." Deciding on the scope of the exception was hence also a matter of competition policy moored in the patent regime. Restricting the benefits of the patentee to the demand for its technical contribution was a solution dictated by the principle of free competition in order to avoid competition "suppression", as the Court put it, on the tied-product market. The Court was in essence arguing that the patentee could only derive profit from a market in which its inventive contribution played a role. This specific use of the patent was therefore found to be contrary to the public interest and the patentee was barred from enforcing its rights.

Obviously, those tying cases would have been resolved in a different manner today. But still, *Motion Picture* and the cases that applied it stand for the important proposition that since patents are rights dictated by the public interest their exercise is subject to post-grant control for conformity with

104 *Carbice Corporation of America v. American Patents Development Corporation et al.*, *supra* note 100, at 32.

105 Sullivan & Grimes, "The Law of Antitrust: An Integrated Handbook" 420 (2nd ed. 2006).

106 *In Motion Picture Picture Patents Company v. Universal Film Manufacturing Company*, *supra* note 99, at 519, the Court was anxious that permitting the leverage strategy at issue would "give to the plaintiff such a potential power for evil over an industry which must be recognized as an important element in the amusement life of the nation ..."

that purpose at the infringement stage.[107] Patent misuse amounts therefore to a limitation of the patentee's rights, which is immanent to the patent system. The Supreme Court hereby abolished the notion contemplated in *Henry v. A.B. Dick Co.*[108] that the public interest of promoting innovation is actually served when the patentee is allowed to enforce its patent monopoly as he sees fit.[109] In that case, the plaintiff was held to have permissibly tied the sale of rotary mimeograph machines to stencil paper, ink and other supplies of its production. On the other hand, *Motion Picture*, *Carbice* and *Leitch* follow a market-oriented approach focusing on the effects of a specific strategic use of a patent on social welfare.[110] It is indeed extremely difficult to discern such uses of patents that should not be upheld because they are socially harmful. However, as shown, the doctrinal tool for disallowing such practices exists in common law in the patent system. Although the term patent misuse and its sanction of *erga omnes* unenforceability were only formulized subsequently in the infamous case of *Morton Salt*,[111] it is the trio of authorities analyzed in this section that has molded the substantive law aspects of the misuse doctrine.[112]

## C. Sanction and Procedural Aspects[113]

Procedurally, misuse is invoked as an affirmative defense in a suit for patent infringement and leads to the general unenforceability of the patent for as long as the adverse effects of its misuse remain in operation. This legal consequence arises even if the defendant has suffered no injury as a result of the patent holder's conduct. Unless the misuse is purged, the patentee cannot take action against any other infringer. The sanction attached to a successful misuse claim indicates the deterring character of the doctrine.

## D. The Gradual Curtailment of the Misuse Defense

In the meantime subsequent case law and legislative intervention have attempted to substantially alter the true nature of the misuse doctrine.

107 *Id.* at 511, citing *Kendall v. Winsor*: "It is undeniably true, that the limited and temporary monopoly granted to inventors was never designed for their exclusive profit or advantage; the benefit to the public or community at large was another and doubtless the primary object in granting and securing that monopoly." Then went on to say: "This Court has never modified this statement of the relative importance of the public and private interests involved in every grant of a patent, even while declaring that, in the construction of patents and patent laws, inventors shall be fairly, even liberally, treated."

108 224 U.S. 1 (1912).

109 *Id.* at 35.

110 For the necessity to adopt such an approach in view of the complementarity theory of the IP and the antitrust law *see* Drexl, "Intellectual Property Rights as Constituent Elements of a Competition-based Market Economy", in: Ghidini & Genovesi (eds.) "Intellectual Property and Market Power", (ATRIP Papers 2006–2007).

111 *Morton Salt Co. v. G.S. Suppinger, Co.*, 314 U.S. 488, 492–493 (1942).

112 Hovenkamp, Janis & Lemley, *supra* note 90, at Sec. 3.2–3-5.

113 Adelmann, "Patent Law Perspectives", Sec. 18.3 (2nd ed., Supp. 2008).



### 1) Reduction to an Equitable Principle

The decline of the misuse theory began in the very same case that is often cited as the one formulating the doctrine. In *Morton Salt* the Court explained the patent misuse doctrine as an exercise of its powers of equitable discretion.[114] To the extent that injunctive relief is barred because the patentee has acted in a manner disapproved by the Courts, there is indeed an analogy with the doctrine of "unclean hands." But in contrast to principles of equity, the patent misuse doctrine applies both to injunctive relief and damages suits.[115] Furthermore, the "unclean hands" defense is successful when the plaintiff's misconduct took place in the course of its interaction with the defendant, whereas the party alleging patent misuse needs not satisfy a standing requirement of personal injury.[116] There is great practical importance to this clarification since the role of patent misuse is not to ensure a result that does justice and takes only account of the interests of all parties involved in a specific dispute. Comprehending the doctrine as arising in equity would lead us to a false line of reasoning, giving prominence to the rights of the patent holder. It is rather a substantive limitation[117] of patent rights that has been exercised in a way that runs contrary to public policy.

### 2) The Misconception of the Misuse Doctrine as a Manifestation of the Inherency Doctrine

The inherency doctrine attempted to define distinguished spheres of application for patent and antitrust law respectively. Under this conceptualization the misuse doctrine was applied to restrain the profit-seeking activity of the patentee to those exploitative uses that flow directly out of its right of exclusion.[118] The patentee was not allowed to extract profit by expanding the physical or the temporal scope of the patent. Consequently, arrangements that were held as constituting misuse included tying arrangements, package licensing, covenants not to deal and royalties based on total sales regardless of which products incorporated the licensed invention.[119] In all these cases

114 *Morton Salt Co. v. G.S. Suppinger, Co.*, 314 U.S. 488, 492–493 (1942).

115 Brinson, "Patent Misuse: Time for a Change", 16 Rutgers Computer & Tech. L.J. 357, 357 (1990).

116 Chisum, "Chisum on Patents", Sec. 19.04[5] at 19–541 (Supp. 2009); Nicoson, "Misuse of the Misuse Doctrine in Infringement Suits", 9 UCLA L. Rev. 76, 77 (1962).

117 Chafee, "Coming Into Equity with Unclean Hands", 47 Mich. L. Rev. 1065, 1071–1074 (1949), arguing that the reason for rooting patent misuse to equity has been plainly the fact that the relevant precedents were related to injunctions.

118 Tom & Newberg, "Antitrust and Intellectual Property: From Separate Spheres to Unified Field", 66 Antitrust L.J. 167, 172 (1998).

119 *Morton Salt Co. v. G.S. Suppinger, Co.*, 314 U.S. 488 (1942) (tying); *Automatic Radio Mfg. Co. v. Hazeltine Research Inc.*, 339 U.S. 827 (1950) (package licensing); *National Lockwasher Co. v. George Garett Co.*, 137 F.3d 255 (3rd Cir. 1943) (tie outs); *Zenith Radio Corp. v. Hazeltine Research Inc.*, 395 U.S. 100 (1969) (total sales royalties). For an exhaustive presentation of case law related to the patent misuse doctrine *see* Chisum, *supra* note 116, at Sec. 19.04; and Adelmann *supra* note 113, at Sec. 18.

the patentee seeks to capture unpatented material and its exploitative efforts bear no direct relationship to its right of exclusion. Patent misuse was also affirmed with regard to post-expiration royalties because the right holder was seeking to extract a profit from an expired patent.[120] Those opinions did not embrace the teaching of early case law that sought to exclude from the scope of protection those uses that in effect collide with public policy. Instead, they created a per se rule that barred every strategic use of the patent that was conferring control upon subject matter not contained in the patent claims or outside of the temporal scope of the patent.[121] The peak of this evolution was marked by the ruling of the Supreme Court in *Mercoid Corp. v. Mid-Continent Investment Co.*[122] The right holder tied its patent (a furnace system) with non-staple articles namely "stoker switches" that had no other substantial non-infringing use because they could not be used in any way other than being components of the patented machine. The patentee was held to have misused the patent because it was trying to control unpatented material.[123]

3) Patent Misuse and Contributory Infringement

The result in *Mercoid* led practically to an evanescence of the theory of contributory infringement. Congress amended the Patent Act in 1952 so that the contributory infringer could not escape liability based on the patent misuse defense. This general principle is expressed in Sec. 271(d) of the Patent Act. The same section provides explicitly under lit. (c) for a contributory infringer liability of the seller of non-staple articles. The new rule has been interpreted to reflect a compromise between the doctrines of patent misuse and contributory infringement and giving effect to both of them.[124]

4) Absorption of the Misuse Defense by the Antitrust Rule of Reason

After the *Mercoid* case the courts gradually abandoned the idea of prohibiting patent practices by referring to the scope of the patentee's right of exclusion. Even if the patentee was attempting to control unpatented material, his arrangements if scrutinized under the antitrust rule of reason would turn out to be precompetitive in general. The sustainment of a misuse defense should thus follow a factual determination, which reveals that "the overall effect of the license tends to restrain competition unlawfully in an

120 *Brulotte v. Thys Co.*, 379 U.S. 29, 38 (1964).

121 Frost, "Patent Misuse as a Per Se Antitrust Violation", in: Rahl & Zaidins (eds.), "Conference on the Antitrust Laws and the Attorney General's Committee Report" 113, 117 (1955).

122 *Mercoid Corp. v. Mid-Continent Investment Co.*, 320 U.S. 661 (1944), *(Mercoid I)*.

123 *Id.* 664–665.

124 *Dawson Chemical Co. v. Rohm & Haas Co.*, 448 U.S. 176, 200; Rich, "Infringement Under Section 271 of the Patent Act of 1952", 21 Geo. Wash. L. Rev. 521, 536 (1953); Hogg, "Patent Misuse Before and After Section 271", 42 J. Pat. & Trademark Off. Soc'y 683, 686 (1960).



appropriately defined relevant market."[125] Thus, in the field of licensing the misuse doctrine became obsolete. The Patent Act was amended again in 1988 to exclude the finding of a misuse in cases of refusal to license or use any rights to the patent and in tying cases where the right holder has no market power in the market for the patented product.[126]

5) The Misuse Doctrine is Alive and Evolving

Although case law suggests that antitrust analysis of patent exploitation under the rule of reason has absorbed the doctrine of patent misuse, the legislative history of the 1988 amendment indicates that it was not meant to abolish the misuse theory.[127] This creates a rather peculiar legal situation.

125 *Windsurfing International, Inc. v. AMF Inc.*, 782 F.3d 995, 1002 (Fed. Cir. 1986) (inclusion in a patent license of a requirement that the licensee acknowledge validity of patent holder's trademarks was held as not amounting to patent misuse because it did not restrain competition unlawfully in an appropriately defined relevant market. Trademark enforcement is in general precompetitive.); *USM Corp. v. SPS Technologies Inc.*, 694 F.3d 505, 511 *et seq.* (7th Cir. 1982). (The patent owner did not commit patent misuse by including a differential royalty schedule in the license agreement entered into as part of the settlement of parties' earlier suit for patent infringement. The patentee has sought to maximize its profit through price discrimination but no anticompetitive effect had been shown. In his opinion Judge Posner examined licensing schemes held to constitute patent misuse and opined they are valid under the antitrust rule of reason. According to his view there is no criterion available apart from antitrust scrutiny to legally assess patent exploitation.); *Mallinckrodt, Inc. v. Medipart, Inc.*, 976 F.3d 700, 708 (Fed. Cir. 1992) ("The appropriate criterion [for a finding or patent misuse] is whether [... the] restriction is reasonably within the patent grant and into behavior having an anticompetitive effect not justifiable under the rule of reason." The case concerned a reuse prohibition imposed on the buyer of a patented medical device. An anticompetitive effect unjustifiable by the antitrust rule of reason was not found); Bilicki, "Standard Antitrust Analysis and the Doctrine of Patent Misuse: A Unification Under the Rule of Reason", 46 U. Pitt. L. Rev. 209 (1985); Hovenkamp, *supra* note 68, at Sec. 5.5b., 245, arguing patent misuse principles could only be relevant if there is legislation to that effect.

126 Sec. 271(d)(4) and (5) Patent Act. *See also In re Recombinant DNA Technology Patent and Contract Litigation*, 30 USPQ2d 1881, 1896 (S.D. Ind. 1994). The case ruled that the requirement of a finding of market power in the tying product market established in this section for tie-ins applies to tie-out provisions as well. The defendant argued that a license provision allowing the licensor to terminate the license, if the licensee sold recombinant insulin or human growth hormones produced using the licensed patent method without using the microorganisms or patented technology of the licensor, constituted patent misuse. The defense was rejected because there was no showing of market power in the tying product market).

127 Weinschel, "Antitrust – Intellectual Property Handbook" 2–33 (2000); *Lasercomb America, Inc. v. Reynolds*, 911 F.3d 970, 976, n. 15 (4th Cir. 1990), "The patent misuse defense also has been acknowledged by Congress in the 1988 Patent Misuse Reform Act [...] which limited but did not eliminate the defense."; Webb & Locke, "Intellectual Property Misuse: Developments in the Misuse Doctrine", 4 Harv. J.L. Tech. 257, 267 (1991); Bennet, "Patent Misuse: Must an Alleged Infringer Prove an Antitrust Violation?" 17 AIPLA Q.J. 1, 9, 19 (1989).

The Patent Act is supplemented by a common law doctrine whose scope of application has been partially reduced by judicial intervention.[128] In the licensing context it lost significant ground since the public policy concerns that underlie it became part of the legal evaluation under the antitrust rule of reason.[129] As already submitted the patent misuse doctrine retains a considerable scope of application by controlling unilateral exercise of patent rights through the standard of public interest.[130] That patent misuse can be affirmed without a finding of an antitrust violation is evident by the observance that the incentives paradigm is independent of and complementary to antitrust theory.[131]

## VII. *Applying the Patent Misuse Doctrine in the Context of Standards*

Deceptive use of the patent system during participation in an SSO runs contrary to both patent and competition policy and therefore constitutes patent misuse.[132] Rendering the patent unenforceable in cases of deceptive

128 LEMLEY, "The Economic Irrationality of the Patent Misuse Doctrine", 8 Cal. L. Rev. 1599, 1610 (1990). He doubts the serviceability of the doctrine though.

129 A potential autonomous field of application for the patent misuse doctrine could be found for cases where antitrust scrutiny cannot take account of the effects on innovation of allowing or prohibiting a patent exploitation scheme.

130 There is literature supporting with varying argumentation an independent role for patent misuse: NOTE, "Is the Patent Misuse Doctrine Obsolete?" 110 Harv. L. Rev. 1922–1939 (1997); GORDON & HOERNER, "Overview and Historical Development of the Misuse Doctrine", in: ABA SECTION FOR ANTITRUST LAW (eds.), "Intellectual Property Misuse: Licensing and Litigation" 1, 33–36 (2000); WHITE, "A Rule for Determining When Patent Misuse Should be Applied", 2001 Fordham Intell. Prop., Media & Ent. L.J. 671; NICOSON, *supra* note 116, at 99–110; FELDMAN, "The Insufficiency of Antitrust Analysis for Patent Misuse", 55 Hastings L.J. 399 (2004).

131 *See also* CHISUM, *supra* note 116, at Sec. 19.04(2) (19, 444–446), emphasizing the separate policy concerns between the antitrust law and the misuse concept. This interpretation is also consistent with the "abuse" concept of Art. 8(2) TRIPS, which allows for exceptions to protection broader than those resulting from antitrust laws, since it does not require a finding of market power and simply presupposes the existence of an exclusive right. *See* HEINEMANN, "Antitrust Law of Intellectual Property in the TRIPS Agreement of the World Trade Organization", in: BEIER & SCHRICKER (eds.), "From GATT to TRIPs – The Agreement on Trade Related Aspects of Intellectual Property Rights" 239, 243 (1996). The public policy objectives postulated in Arts. 7 and 8 of the TRIPS agreement indicate that the abuse concept is to be understood broadly. *See* REICHMANN, "Universal Minimum Standards of Intellectual Property Protection Under the TRIPs Component of the WTO Agrememnt", 29 Int'l Law. 345, 354–355 (1995). The counterargument reads Art. 8(2) TRIPS in view of its compatibility clause as a programmatic statement, the content of which is authentically defined in more specific subsequent provisions such as Arts. 40 or 31 TRIPS. *See* HOVENKAMP, JANIS & LEMLEY, *supra* note 90, at Sec. 40.2.

132 The application of the misuse theory to patent enforcement in network industries has also been suggested, albeit with a different line of reasoning, by MUELER, "Patent Misuse

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continuations from participants in SSOs would facilitate the creation of standards that are accessible by the greatest possible number of competitors. Such intensification of competition within a standard increases output and reduces prices. Widening the access to the standard would simultaneously concentrate innovative effort within the standardized technology. This is also in line with the principle of patent law to discourage activity that wastes resources without adequately contributing to social welfare.[133] When it comes to network industries, it is precisely such innovative activity that is socially desirable. Promoting trust within SSOs also makes it easier for the industry to abandon the standard and move on standardizing new technologies.[134] These are actually the structural elements of an effective competition in a situation where standardization is necessary.[135] Schumpeterean competition cannot yield the welfare-maximizing result in this context. That would mean we should allow the standard to be captured by an ambusher in anticipation that its supra-competitive profits would provoke competitors to invent technologies capable of outperforming the existing standard and displace the monopolist from its position of economic power. The result, however, would be a reduction in social welfare. Price and output would always be suboptimal and the shift to a new standard would be more costly and difficult to achieve.

Patent ambush creates a situation where the patentee acquires market power beyond the level dictated by the incentives paradigm.[136] An undertaking that is active in the market for technology licensing may legitimately expect to exercise monopoly power against downstream producers.[137] While his innovation indeed plays a role in the market where he is seeking economic reward, the market power he wishes to exercise does not exclusively derive from his inventive contribution but is mainly attributed to the standardizing

(Contd. from page 812)

Through the Capture of Industry Standards", 17 Berkeley Tech. L.J. 623, 669 (2002) and "Patenting Industry Standards", *supra* note 86 at 934.

133 GRADY & ALEXANDER, "Patent Law and Rent Dissipation", 78 Va. L. Rev. 305 (1992); MERGES, "Rent Dissipation in the Patent District: Observations in the Grady-Alexander Thesis", 78 Va. L. Rev. 359 (1992).

134 FARELL & SALOMER, "Standardization, Compatibility and Innovation", 16 Rand J. Econ. 70, 71 (1985).

135 DREXL, *supra* note 31, at 153–154; and MACKENRODT, *supra* note 88 passim.

136 *See also Atari Games Corp. v. Nintendo of America, Inc.*, 897 F.2d 1572, 1576 (Fed. Cir. 1990) "[A] patent owner may not take the property right granted by a patent and use it to extend his power in the marketplace improperly, i.e. beyond the limits of what Congress intended to give in the patent laws."

137 The argument behind this remark is that where the inventor is innovating, having in mind a specific market, intellectual property law should allocate this matter to him because this is exactly where his incentive to innovate derives. For such an approach *see* the DG Competition Discussion Paper on the application of Art. 82 to exclusionary abuses at para. 236, available at http://ec.europa.eu/competition/antitrust/art82/discpaper 2005.pdf.

activity of the industry.[138] Patent ambushing is therefore an impermissible extention the economic scope of the patent.

In conclusion, deception with regard to patent interests is an act of patent exploitation that runs contrary to the public interest. The patent misuse doctrine renders the patent unenforceable so as to avoid harm to social welfare by deterring such conduct.

Even more challenging appears to be the question whether the patent misuse doctrine could be applied in order to control the royalty rates of the patentee even if its invention was not incorporated into the standard through deception. If the standardization process has not been distorted and the SSO is able to take informed decisions, the welfare-maximizing result described above can only be achieved through a liability rule. Thinking in terms of economic analysis of law, this legal problem features a certain analogy with the hold-out problem observed in property law, when large-scale development projects require the assembly of land whose ownership is dispersed.[139] Just as in that case, there is a welfare-increasing project (standardization) that touches upon a property right (patent). The value of the property right (patent) increases because the entrepreneur of the project (SSO) has found a use for it that creates advantages that are akin to those brought forward by economies of scale.[140] Theory suggests such problems ought to be resolved by liability rules.[141]

It might be a well-established principle of patent law that the right holder is free to set the level of royalties for its invention to profit-maximizing levels regardless of how high the end price for the consumer might be. Incentives to innovate are provided by guaranteeing the possibility for the patentee to earn the entire economic benefit the market is willing to offer for licensing the invention.[142] However, there is misuse precedent that seeks to control royalty setting in view of its impact on the industry as a whole. It has been held that it constitutes patent misuse to charge an "exorbitant, oppressive royalty, involving the bulk of the industry, with a corresponding raise of the manufacturer's and retailer's selling prices of the licensed machines."[143] The precedential value of such ruling is, with good reason, questioned.[144] Controlling the pricing behavior of the patent monopolist should be an extraordinary exception. In our view, network industries are one of those rare

138 *Cf.* Patterson, "Inventions, Industry Standards, and Intellectual Property", 17 Berkeley Tech. L.J. 1043, 1052 (2002).

139 *See* generally Shavell, "Foundations of Economic Analysis of the Law" 124 (2004); Posner, "Economic Analysis of Law" 53–55 (2007).

140 Cohen, "Holdouts and Free Riders", 20 J. Legal Stud. 351, 362 (1991).

141 Friedman, "Law's Order: What Economics has to Do with Law and Why That Matters" 51, 52 (2001).

142 *Brulotte v. Thys Co.*, 379 U.S. 29, 33 (1964).

143 *American Photocopy Equipment Company v. Rovico, Inc.*, 359 F.2d 745, 748 (1966).

144 Chisum, *supra* note 116, Sec. 19.04(3)(f) at 19–488; Note, "Regulation of Patent License Royalty Rates Under the Antitrust Laws", 65 Mich. L. Rev. 1631, 1641 (1967).



examples where the control of the patentee's pricing strategy is justified by the public interest of promoting wide commercialization of standardized technology. In industries where network effects are present, the need for widespread commercialization has special significance both in terms of static (optimal price and output) and dynamic efficiency (concentration of innovative intelligence within the standard). The fact that the patentee can license in a widely standardized market is a guarantee that it will have an incentive to innovate even if the company would not be allowed to license on monopolistic terms. A liability rule imposed by the misuse doctrine would simultaneously make sure the degree of commercialization is towards the optimum.[145]

Patent misuse could also apply in this case so as to control the profit-seeking activity of the patentee and put limits on patent exploitation dictated by public interest. In such a case the legal consequence attached to the misuse doctrine has to be modified by creating a liability rule in order to better serve the public interest.[146] Equally the patent misuse doctrine could be utilized to reduce the patent scope in the case of a proprietary standard so as to prevent the patent holder from suppressing socially desirable sequential innovation.[147]

## *VIII. Short Comment on the European Perspective*

Article 82(a) of the EC Treaty provides a wider legal framework for controlling pricing behavior than the Sherman Act in that its reach goes beyond predation and explicitly prohibits exploitative pricing abuses of dominant undertakings imposing unfair purchase or selling prices. This could be a gateway for a case like *Rambus*, where it is easy to establish dominance since the adoption of the DRAM standard incorporating proprietary technology has been industry wide. This is still not an adequate solution since EC

145 For issues of creating efficiencies by cutting down the market power of the patentee through liability rules without losing in incentives to innovate *see* Ayres & Klemperer, "Limiting Patentee's Market Power Without Reducing Innovation Incentives: The Perverse Benefits of Uncertainty and Non-Injunctive Remedies", 97 Mich. L. Rev. 985 (1999); Awarding property rights does not necessarily mean they should be enforced by property rules *see* Calabresi & Melamed, "Property Rules, Liability Rules, and Inalienability: One View of the Cathedral", 85 Harv. L. Rev. 1089, 1092 (1972).

146 The patent misuse doctrine is flexible with regard to the remedies attaching to the finding of a misuse. Patent unenforceability is not the only possible remedy; Ostrau, "The Misuse Doctrine: Issues of Scope and Remedy" in: ABA Section for Antitrust Law (eds.) *supra* note 130, at 203. The doctrine remains to a great extent amorphous because it is difficult to categorize because there can be no clear and concise casuistry of detrimental patent enforcement and their remedy in each individual case. Those who ascribe patent misuse to equity, *see* Merges, "Reflections on Current Legislation Affecting Patent Misuse", 70 J. Pat. & Trademark Off. Soc'y 793, 796 (1988) attribute this to the "messy" world of equity.

147 *Cf.* Kobak, "Intellectual Property, Competition Law and Hidden Choices Between Original and Sequential Innovation", 6 Va. J.L. & Tech. § 42 (1998).

Competition Law does not control the acquisition of monopoly power and controls market behavior only after the threshold of dominance is reached. It therefore has to put up with an impermissible extension of the patent. Furthermore, European patent law precludes a general public policy limitation of the exclusive right by exhaustively enumerating the limits to protection.[148] This is highly problematic in view of the complementarity principle, which requires a patent protection that promotes the functions of effective competition.[149] Given this legal landscape, the most practicable *de lege lata* solution at the moment in Europe seems to be a pro-competitive application of national unfair competition laws, under which the prominence would be given on the interests of the consuming public.[150]

## *IX. Conclusion*

Patent ambushing is a legal problem that requires a balance between the various incongruous interests of inventors, competitors and the consuming public. It is the realm of patent law that offers valuations capable of embracing the complete array of interests involved. The nature of the legal problem is such that it can only be remedied at the infringement stage. The assertion of patent rights contrary to the interests of the public as concretized in the case of network industries can be barred by an application of the patent misuse doctrine. Patent law would thus serve the public interest by providing incentives for sequential innovation within the standard, promoting trust in the proceedings of SSOs, and controlling royalty rates in network industries so as to achieve welfare-maximizing results.

148 Krasser, "Patentrecht", (2009) at 50.
149 For a *de lege ferenda* discussion *see* Jabbusch, "Funktionsfähigkeit des Patentschutzes und Patentgesetzgebung", 1980 GRUR 761.
150 *See* Drexl, *supra* note 31, at 146 elaborating on the German Act Against Unfair Competition (UWG).



# Opinion

*Thomas T. Jaeger, Reto M. Hilty, Josef Drexl and Hanns Ullrich**

# Comments of the Max Planck Institute for Intellectual Property, Competition and Tax Law on the 2009 Commission Proposal for the Establishment of a Unified European Patent Judiciary[1]

**The Max Planck Institute for Intellectual Property, Competition and Tax Law endorses the Commission's plans for a Community patent, which promises several key advantages as compared to fragmented rights under the EPC system. The Institute likewise endorses the general structure for patent litigation under the latest proposal advanced by the Council and the Commission in 2009 for the establishment of a European and Community patent court (ECPC), which answers to most of the current problems of ineffectiveness plaguing patent litigation and incorporates a workable compromise between the differing interests of political players and other stakeholders. The Institute underlines in particular that the tasks of creating a substantive patent right for the internal market and of reforming the patent litigation system are essentially separate and may therefore be implemented separately. However, the structure of the ECPC as discussed under the 2009 Proposal requires a number of adaptations to increase effectiveness and to ensure compliance with general Community law.**

## *I. Introduction*

1. The 52-year-old[2] plans to establish a single patent right for the internal market have been hampered for many reasons shifting over time and ranging from early protectionism to concerns over the institutional setup, language requirements or the allocation of revenues and costs. An instrument setting up the Community patent would also have provided for the establishment of

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1 *Cf.* Draft Agreement of 8 January 2009 on the European and Community Patents Court (Proposal 2009) and Draft Statute (Draft Statute ECPC), both Council Document No. 5072/09.
2 *Cf.* F.-K. Beier, "Stand und Aussichten der europäischen Rechtsvereinheitlichung auf dem Gebiete des gewerblichen Rechtsschutzes", 1969 GRUR Int. 145, 146 *et seq.*