X. ANTITRUST AND INTELLECTUAL PROPERTY

A. Overview

Antitrust has many frontiers. The Sherman and Clayton Acts, and the policies they express, interact in a variety of ways with other areas of law, from contract (*e.g.*, when can a party to an agreement avoid its contractual obligation to perform on the ground that the agreement is anticompetitive?[794]) to constitutional law (*e.g.*, when is anticompetitive conduct constitutionally protected?[795]). But one of the most important, controversial, and heavily litigated frontiers is the one that antitrust shares with intellectual property law.

At the very highest level of generality, both the antitrust laws and the intellectual property laws represent efforts to promote the public interest by regulating the process of business rivalry. Thus, as we have seen throughout this book, the antitrust laws aim to promote social welfare by purporting to divide market rivalry into competition "on the merits," which is protected and encouraged, and "anticompetitive" practices and transactions, which are often prohibited. The antitrust project rests on the expectation that sorting business rivalry into these two categories will benefit society through lower prices, better-quality products and services, and—importantly for this Chapter—increased innovation.

The intellectual property laws also aim to promote social welfare by regulating market rivalry. In particular, they reflect an effort to encourage certain kinds of investment by guaranteeing the ability to enjoy certain rewards from such investments. Each system of intellectual property law aims at this goal in a different way.

Patent law, copyright law, and trade secret law are focused on incentivizing innovation in particular. Patent law is arguably the most fully articulated branch of intellectual property law. It confers on the inventor of any "new and useful process, machine, manufacture, or composition of matter," any "distinct and new variety of plant," or any "new, original and ornamental design for an article of manufacture" an exclusive right to make, use, or sell the invention throughout the United States, or to authorize others to do so, for a term of years.[796] Copyright law confers on the creator of an original artistic or literary work exclusive rights (also of limited duration) to reproduce, adapt, distribute, or publicly perform or display that work.[797] Trade secret law protects certain kinds of confidential business information—such as formulas, designs, and compilations of information—from disclosure. In each case, the premise of the right is that the prospect of legal protection, and the ability to monetize that protection through profits or royalties, will encourage investment in the creation of desirable inventions, creative works, and valuable confidential business information. Or, to put it another way, the premise is that if others could "free ride" without restriction on the benefits of successful innovation, which is often costly and risky for those undertaking it, then there would be less innovation and society would be worse off as a result.

Of course, each of these mechanisms also suppresses some innovation. The enforcement of an IP right (or even the threat of enforcement) may suppress certain kinds of valuable innovation that copies or incorporates the patented invention, the copyrighted work, or the secret information. The existence of our intellectual property laws thus reflects a policy bet that the social benefits to innovation from recognizing and protecting IP rights will exceed the social costs (including forgone innovation as well as higher prices) of restricting or prohibiting certain forms of infringing activity.[798]

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[794] *See*, *e.g.*, Tampa Elec. Co. v. Nashville Coal Co., 365 U.S. 320 (1961).

[795] *See supra* Chapter IX (*Noerr-Pennington* and state action defenses).

[796] *See* 35 U.S.C. §§ 101,154,161,171.

[797] *See* 17 U.S.C. § 106.

[798] The term "bet" is apt: we have, particularly for copyright law, less information about the social costs and benefits of protection than we would need to be sure about the balance of the trade. *See, e.g.,* Christopher Jon Sprigman, *Copyright and Creative Incentives: What We Know (And Don't)*, 55 Hous. L. Rev. 451 (2017).

Trademark law is situated a little differently. Trademark law protects various indicia (words, symbols, sounds, etc.) used to identify the source of products and services, against unauthorized use by others in ways that would undermine the relationship of identity and association that the mark expresses. The central purpose of trademark protection is to encourage a business to invest in its brand and reputation, safe in the knowledge that the benefits of that investment will not be appropriated by competitors, or diluted by third-party use of the mark. Thus, it too aims to protect against "free riding": but on investment in a brand and reputation rather than in innovation as such.

1. Are IP and Antitrust in Conflict?

Courts and commentators have disagreed for many years over whether the antitrust and IP systems are in a meaningful sense "in conflict" with one another.[799] The nature of the apparent conflict is easy to see. Some would-be copyists aim to compete in an economic sense against the rightsholder: for example, someone might create a pirate copy of a song or movie in an effort to win sales away from the rightsholder, or a competitor might infringe a rival's patent in an effort to create a better or cheaper mousetrap than the rival. We generally think of antitrust as encouraging competition among substitute protects or services: including lower-cost imitations of a successful rival. But in these and similar cases the intellectual-property laws may give an incumbent the power to stop—or at least to extract value from—certain kinds of competitive imitation. In such cases we might say that the competition-promoting project of antitrust is "yielding" to the investment-protecting project of intellectual property. Conversely, when a court concludes that a rightsholder has violated the antitrust laws by entering into a licensing agreement on particular terms, or by refusing to license at all, we might say that intellectual property is yielding to antitrust by protecting competition rather than the right of exclusion. In these and similar ways, we might think of antitrust and IP as taking opposing views of competition: antitrust exists to protect it, while IP law exists to protect against certain forms of it.

But the picture is more complicated. First, it is not clear that the tension we have described makes intellectual property uniquely, or even distinctively, situated in relation to antitrust. After all, the entire antitrust project is a limitation on the exercise of certain other rights and freedoms—property, contract, and so on—that are conferred by the state in order to promote social welfare in some sense. For example, the manufacturer of a product has a personal property right in its goods, which the legal system recognizes in part to promote innovation and investment. But antitrust directly limits that right when it prevents a monopolist manufacturer from, say, selling only to customers that commit to dealing exclusively with that manufacturer, or that agree to purchase a tying product as part of an anticompetitive tie. Likewise, a dominant incumbent that obtains exclusive contracts from key input suppliers and distributors has an affirmative right in contract to that exclusivity: but antitrust, of course, directly expropriates that right when it forbids the incumbent to exclude competition in that fashion. In these and other ways we can see that antitrust enforcement is centrally, and

[799] *See*, *e.g.*, Christopher Jon Sprigman, *The Intersection of Patent and Antitrust Law* in Einer Elhauge (ed.), RESEARCH HANDBOOK ON THE ECONOMICS OF ANTITRUST LAW (2012) ("Given their fundamentally incompatible baseline assumptions regarding the consequences of competition for innovation, it makes little sense to insist . . . that there is no essential conflict between IP and the antitrust laws."); Herbert Hovenkamp, *The Antitrust-Intellectual Property Interface* in ABA Section of Antitrust Law, 3 ISSUES IN COMPETITION LAW AND POLICY (2008) ("The relation between intellectual property (IP) and antitrust policy has always been unstable and problematic. Courts have seen an inherent conflict between the two legal regimes. . . . [But] the conflict between IP and antitrust law is easily exaggerated, and the courts have been too ready to find conflicts where none existed."); R. Hewitt Pate, *Antitrust and Intellectual Property* (remarks of Jan. 24, 2003) ("Many observers, particularly in the antitrust community, contend there is a tension between antitrust and intellectual property, arguing that the antitrust laws seek to eliminate monopolies and encourage competition, while the intellectual property laws reward creators and inventors with a limited monopoly. . . . There may be legitimate room for debate. I would suggest, however, that this tension is overstated."); 1-800 Contacts, Inc. v. Fed. Trade Comm'n, 1 F.4th 102, 121–22 (2d Cir. 2021) ("When the restraint at issue in an antitrust action implicates IP rights, [the Supreme Court's *Actavis* decision] directs us to consider the policy goals of the relevant IP law."); SCM Corp. v. Xerox Corp., 645 F.2d 1195, 1203 (2d Cir. 1981) ("The conflict between the antitrust and patent laws arises in the methods they embrace that were designed to achieve reciprocal goals. While the antitrust laws proscribe unreasonable restraints of competition, the patent laws reward the inventor with a temporary monopoly that insulates him from competitive exploitation of his patented art."). *See generally*, *e.g.*, Michael A. Carrier, *Unraveling the Patent-Antitrust Paradox*, 150 U. Pa. L. Rev. 761 (2002); Louis Kaplow, *The Patent-Antitrust Intersection: A Reappraisal*, 97 Harv. L. Rev. 1813 (1984); Ward S. Bowman, Jr., PATENT AND ANTITRUST LAW: A LEGAL AND ECONOMIC APPRAISAL (1973); William F. Baxter, *Legal Restrictions on Exploitation of the Patent Monopoly: An Economic Analysis*, 76 Yale L.J. 267 (1966).

maybe wholly, a project in limiting the exercise of affirmative legal rights and freedoms that the legal system confers for other reasons.

Second, it is not even obvious that the IP laws' central preoccupation with the "right to exclude" is a particularly sharp challenge to the antitrust system. For one thing, the exclusion that intellectual property protects is not the exclusion that antitrust abhors. Modern patent and copyright centrally protect against *duplication*, not against economic competition from functional substitutes as such. Moreover, the very process of competition that antitrust protects is itself constituted by exclusive economic rights. If every competitor could freely use its rivals' stores, employees, facilities, and production lines, or simply seize and sell their goods, there would be no competitive process at all. No-one—not even a monopolist—has a general antitrust obligation to let others use their competitive assets (let alone to do so without reasonable compensation), advertise on their facilities, take and sell their goods, use their machines, direct their employees, or prevent the bare and unconditional enforcement of their property rights. Indeed, antitrust is highly resistant to the idea that a rival has a presumptive right to compete against even a monopolist using the monopolist's own property, even when the property in question is commercially essential for access to a broader market.[800] So antitrust does not really recoil from the idea of exclusive property rights as such.

More subtly still: the exclusionary reach of the IP laws is more qualified, and more compatible with antitrust, than it may seem. As one of us has pointed out elsewhere, even "patent's remedies regime does not align with the theological argument that the patent law provides an 'unqualified' or 'categorical' property right."[801] Despite the popular conception that an injunction is the invariable remedy in an IP case, the remedy for infringement is often not exclusion but rather a right to participate in profits, in the form of a reasonable royalty.[802] That version of an "exclusive right"—the right to a reasonable fee—is very seldom threatened by antitrust enforcement: after all, even the elusive "essential facilities" doctrine allows a monopolist to charge a reasonable fee for access.[803] Nor, on the other side of the coin, is antitrust antagonistic to the unconditional enforcement of a exclusive property right. Throwing a trespassing rival off your property, for example, or filing a reasonably plausible suit for infringement of a property right, is virtually never an antitrust violation.[804] Thus, the tension between IP and antitrust turns out to be more a complicated matter than it might first appear: not a crude opposition, but something much more nuanced.

2. IP and Market Power

Regardless of whether intellectual property law and antitrust are truly in deep policy tension, the interaction between the two systems has presented no end of practical challenges and puzzles for courts and commentators over their long co-existence. One of the most important parts of this process has been the untangling of the relationship between intellectual property and market power.

For much of the 20th century, the Supreme Court was willing to infer the existence of market power, as a matter of law, from the existence of a patent.[805] That came to an end in 2006, with the Court's recognition in *Independent Ink*—a tying case—that market power in the antitrust sense must be proved in every such case.[806] This signaled a return to antitrust's regular rule of the road for the analysis of market power, and the rejection of special presumptions for cases involving IP rights.

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[800] *See supra* Chapter VII.

[801] Christopher Jon Sprigman, *The Intersection of Patent and Antitrust Law* in Einer Elhauge (ed.), RESEARCH HANDBOOK ON THE ECONOMICS OF ANTITRUST LAW (2012) 358.

[802] *See* 35 U.S.C. § 284; eBay Inc. v. MercExchange, L.L.C., 547 U.S. 388 (2006).

[803] *See*, *e.g.*, Kerwin v. Casino, 802 F. App'x 723, 727 (3d Cir. 2020) (obligation under the doctrine is "reasonable access"); Gregory v. Fort Bridger Rendezvous Ass'n, 448 F.3d 1195, 1204 (10th Cir. 2006) (same); Aerotec Int'l, Inc. v. Honeywell Int'l, Inc., 836 F.3d 1171, 1185 (9th Cir. 2016) (same); Hecht v. Pro-Football, Inc., 570 F.2d 982, 992 (D.C. Cir. 1977) ("fair terms"). *See supra* § VII.E (describing essential facilities doctrine).

[804] *See*, *e.g.*, Professional Real Estate Investors, Inc. v. Columbia Pictures Industries, 508 U.S. 49, 65 (1993) (no antitrust liability for an "objectively plausible effort to enforce rights").

[805] *See*, *e.g.*, International Salt Co. v. United States, 332 U.S. 392 (1947).

[806] Illinois Tool Works Inc. v. Independent Ink, Inc., 547 U.S. 28, 42–43 (2006).

Illinois Tool Works Inc. v. Independent Ink, Inc.

547 U.S. 28 (2006)

[1] Petitioners, Trident, Inc., and its parent, Illinois Tool Works Inc., manufacture and market printing systems that include three relevant components: (1) a patented piezoelectric impulse ink jet printhead; (2) a patented ink container, consisting of a bottle and valved cap, which attaches to the printhead; and (3) specially designed, but unpatented, ink. Petitioners sell their systems to original equipment manufacturers (OEMs) who are licensed to incorporate the printheads and containers into printers that are in turn sold to companies for use in printing barcodes on cartons and packaging materials. The OEMs agree that they will purchase their ink exclusively from petitioners, and that neither they nor their customers will refill the patented containers with ink of any kind.

[2] Respondent, Independent Ink, Inc., has developed an ink with the same chemical composition as the ink sold by petitioners. After an infringement action brought by Trident against Independent was dismissed for lack of personal jurisdiction, Independent filed suit against Trident seeking a judgment of noninfringement and invalidity of Trident's patents. In an amended complaint, it alleged that petitioners are engaged in illegal tying and monopolization in violation of §§ 1 and 2 of the Sherman Act. 15 U.S.C. §§ 1, 2. [. . .]

[3] Respondent [proposes] that we differentiate between tying arrangements involving the simultaneous purchase of two products that are arguably two components of a single product—such as the provision of surgical services and anesthesiology in the same operation, or the licensing of one copyrighted film on condition that the licensee take a package of several films in the same transaction—and a tying arrangement involving the purchase of unpatented goods over a period of time, a so-called "requirements tie." According to respondent, we should recognize a presumption of market power when faced with the latter type of arrangements because they provide a means for charging large volume purchasers a higher royalty for use of the patent than small purchasers must pay, a form of discrimination that "is strong evidence of market power."

[4] The opinion that imported the "patent equals market power" presumption into our antitrust jurisprudence, however, provides no support for respondent's proposed alternative. In [International Salt Co. v. U.S., 332 U.S. 392 (1947)] it was the existence of the patent on the tying product, rather than the use of a requirements tie, that led the Court to presume market power. Moreover, the requirements tie in that case did not involve any price discrimination between large volume and small volume purchasers or evidence of noncompetitive pricing. Instead, the leases at issue provided that if any competitor offered salt, the tied product, at a lower price, the lessee should be free to buy in the open market, unless appellant would furnish the salt at an equal price.

[5] . . . [T]he vast majority of academic literature recognizes that a patent does not necessarily confer market power. Similarly, while price discrimination may provide evidence of market power, particularly if buttressed by evidence that the patentee has charged an above-market price for the tied package, it is generally recognized that it also occurs in fully competitive markets. We are not persuaded that the combination of these two factors should give rise to a presumption of market power when neither is sufficient to do so standing alone. Rather, the lesson to be learned from *International Salt* and the academic commentary is the same: Many tying arrangements, even those involving patents and requirements ties, are fully consistent with a free, competitive market. For this reason, we reject both respondent's proposed rebuttable presumption and their narrower alternative.

[6] It is no doubt the virtual consensus among economists that has persuaded the enforcement agencies to reject the position that the Government took when it supported the per se rule that the Court adopted in the 1940's. In antitrust guidelines issued jointly by the Department of Justice and the Federal Trade Commission in 1995, the enforcement agencies stated that in the exercise of their prosecutorial discretion they "will not presume that a patent, copyright, or trade secret necessarily confers market power upon its owner." . . . While that choice is not binding on the Court, it would be unusual for the Judiciary to replace the normal rule of lenity that is applied in criminal cases with a rule of severity for a special category of antitrust cases.

[7] Congress, the antitrust enforcement agencies, and most economists have all reached the conclusion that a patent does not necessarily confer market power upon the patentee. Today, we reach the same conclusion, and

therefore hold that, in all cases involving a tying arrangement, the plaintiff must prove that the defendant has market power in the tying product.

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Even in the wake of *Independent Ink*, intellectual property rights may still contribute to market or monopoly power in an individual case. This may be easiest to see with patent rights. For example, suppose that a pharmaceutical company holds a strong patent protecting a technology that is necessary to satisfy a particular kind of demand: this might be the case for a particular molecule with important therapeutic effects, for which no adequate substitutes exist. Such a right may well create very substantial market power, or even monopoly power. The crucial question, with patents as with other assets, is whether there are reasonable substitutes for the right in question. Assessing this will often require an understanding of what rights exactly are controlled by the rightsholder, what demand exists for such rights, and what alternative technologies exist.[807] Pharmaceutical markets in particular may be very narrow, such that a patent right may confer something like monopoly power over a particular form of therapy for a particular medical indication.[808]

Copyright, too may confer some power over competition. Generally speaking, the copyright laws protect a narrower set of rights than the patent laws do: for example, they protect creative expression but not the ideas underlying it, leaving room for similar activity by rivals. [809] But, on the other hand, markets for creative works like novels and songs are often highly differentiated, with inelastic demand for particular kinds of output. As one commentator has argued: "because everyone has a favorite author, and is willing to pay a little more, drive a little further, or search a little harder for a particular work by a particular author, even a very narrow copyright would grant most authors, and certainly all popular authors, some degree of market power."[810] Judicial practice in defining antitrust markets for creative and cultural activities is sparse, and the common principles are not obvious.[811] But it is clear that in appropriate cases, the possession of copyright interests—including not only those pertaining to artistic work but also those protecting source and object code describing software interfaces such as APIs—can grant market power in the absence of reasonable substitutes for the protected works.

Trademark law and trade secret laws are, at least in general, somewhat less likely to be a source of market power.[812] The rights of a trademark owner only extend to avoiding confusion regarding the source of products, or damage to the identification value of the mark. However, trademark law can serve to protect market power that the trademark owner has acquired through investment in its brand and reputation. Indeed, the value proposition of a trademark rests on the idea that there is some inelastic demand for the output of the business in question, making the mark worth protecting. Likewise, trade secret laws have only a narrow preclusive effect: they do not restrict mimicry, independent discovery, or reverse engineering of the protected information. As a result, they may be less likely to grant the freedom from close substitute competition that patent and copyright

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807 *See*, *e.g.*, Intel Corp. v. Fortress Inv. Grp. LLC, 511 F. Supp. 3d 1006, 1024 (N.D. Cal. 2021) ("Without having an understanding of how many patents there are in a given product market, it is difficult to say that the relevant defendants' possession of their patents constitutes market power—even more so when taking into account that Plaintiffs have claimed . . . product markets that are relatively broad in scope.").

808 *See generally*, *e.g.*, Michael A. Carrier, *Three Challenges for Pharmaceutical Antitrust*, 59 Santa Clara L. Rev. 615 (2020); Richard G. Frank & Raymond S. Hartman, *The Nature of Pharmaceutical Competition: Implications for Antitrust Analysis*, 22 Intl. J. Econ. Bus. 301 (2015); Herbert Hovenkamp, *Sensible Antitrust Rules for Pharmaceutical Competition*, 39 U.S.F. L. Rev. 11 (2004); David A. Balto & James F. Mongoven, *Antitrust Enforcement in Pharmaceutical Industry Mergers*, 54 Food & Drug L.J. 255 (1999).

809 *See* 17 U.S.C. § 102(b) (setting out distinction between copyrightable expression and uncopyrightable ideas, principles, processes, methods of operation, etc.).

810 Glynn S. Lunney Jr., *Reexamining Copyright's Incentives--Access Paradigm*, 49 Vand. L. Rev. 483, 519 (1996).

811 *See*, *e.g.*, Le v. Zuffa, LLC, 216 F. Supp. 3d 1154, 1166–67 (D. Nev. 2016) (sustaining "elite mixed martial arts" as a relevant market for antitrust analysis at the motion to dismiss stage); In re Live Concert Antitrust Litig., 863 F. Supp. 2d 966, 984–99 (C.D. Cal. 2012) (rejecting under *Daubert* an expert report purporting to define a market for "live rock music concerts"); Christou v. Beatport, LLC, 849 F. Supp. 2d 1055, 1065 (D. Colo. 2012) (sustaining, for purposes of motion to dismiss, a market for "downloads of DRM-free, high fidelity Electronic Dance Music"); Navarra v. Marlborough Gallery, Inc., 820 F. Supp. 2d 477, 487 (S.D.N.Y. 2011) (rejecting as implausibly *broad* a market that combined original and replica ceramics by the same creator), *vacated on other grounds*, Case No. 10-CV-7547, 2012 WL 13210272 (S.D.N.Y. Apr. 4, 2012); Vitale v. Marlborough Gallery, Case No. 93 CIV. (PKL) 6276, 1994 WL 654494, at *4 (S.D.N.Y. July 5, 1994) (sustaining, for purposes of motion to dismiss, a market for Jackson Pollock paintings).

812 *See*, *e.g.*, Clorox Co. v. Sterling Winthrop, Inc., 117 F.3d 50, 56 (2d Cir. 1997).

law can create. However, in appropriate cases the underlying trade secret may relate to some inelastic demand, even to the point of market power: for example, a secret recipe that competitors are unable to duplicate or reverse-engineer may be the secret of the success of a dominant food or drink brand!

In sum, the relationship between IP rights and market power in the antitrust sense is complex, and generalities are probably not much help. In addition to the foregoing, it is also worth remembering that intellectual property rights (of all kinds) may be subject to various limitations and defenses, such as fair use doctrines, that may further limit market power and permit economic competition with the rightsholder—including, for example, protection for certain kinds of comparative advertising through doctrines like trademark's "nominative fair use."[813]

3. IP and Specific Practices

Antitrust doctrine must not only navigate the relationship between IP and market power: it must also pronounce on the legality of the ways in which IP rights can be acquired, asserted, used, infringed, and licensed in ways that might affect competition. Over antitrust's long history, the views of courts and agencies regarding antitrust analysis of conduct involving IP rights has oscillated across a broad spectrum, ranging from intrusive intervention to broad deference and everything in between. There are many explanations for these shifts over time, including changing views of intellectual property rights, the evolving antitrust treatment of particular commercial practices (such as tying and resale price maintenance), and broader political and industrial trends.[814]

An iconic example of changing attitudes to IP practices is the fate of the DOJ Antitrust Division's (in)famous "Nine No Nos" for IP licensing, announced as DOJ antitrust enforcement policy in 1970. They provided:

> (1) "It is clear that it is unlawful to require a licensee to purchase unpatented materials from the licensor";
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> (2) "[T]he Department views it as unlawful for a patentee to require a licensee to assign to the patentee any patent which may be issued to the licensee after the licensing arrangement is executed";
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> (3) "The Department believes it is unlawful to attempt to restrict a purchaser of a patented product in the resale of that product";
>
> (4) "[A] patentee may not restrict his licensee's freedom to deal in the products or services not within the scope of the patent";
>
> (5) "[T]he Department believes it to be unlawful or a patentee to agree with his licensee that he will not, without the licensee's consent, grant further licenses to any other person";
>
> (6) "[T]he Department believes that mandatory package licensing is an unlawful extension of the patent grant";
>
> (7) "[T]he Department believes that it is unlawful for a patentee to insist, as a condition of the license, that his licensee pay royalties in an amount not reasonably related to the licensee's sales of products covered by the patent-for example, royalties on the total sales of products of the general type covered by the licensed patent";
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> (8) "[I]t is pretty clearly unlawful for the owner of a process patent to attempt to place restrictions in his licensee's sales of products made by the use of the patented process"; and

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[813] *See* 15 U.S.C. § 107 (copyright fair use); 15 U.S.C. §1115(b)(4) (Lanham Act fair use); KP Permanent Make-Up, Inc. v. Lasting Impression I, Inc., 543 U.S. 111 (2004) (holding that fair use defense applies even where evidence shows consumer confusion).

[814] For a wide spectrum of approaches, *see*, *e.g.*, Federal Trade Commission v. Qualcomm Inc., 969 F.3d 974 (9th Cir. 2020) (deference to licensing practices); Illinois Tool Works Inc. v. Independent Ink, Inc., 547 U.S. 28, 42–43 (2006) (mandating rule of reason analysis for patent tying); United States v. Masonite Corp., 316 U.S. 265 (1942) (invalidating price restraints in a patent license); Morton Salt Co. v. G.S. Suppiger Co., 314 U.S. 488 (1942) (patent tying unlawful).

(9) ""[T]he Department of Justice considers it unlawful for a patentee to require a licensee to adhere to any specified or minimum price with respect to the licensee's sale of the licensed products."[815]

But the Nine No Nos did not survive the Chicago revolution, which brought a revision of antitrust's relationship with vertical practices in general and its treatment of IP rights in particular.[816] By 1986 the deputy head (and later head) of the Antitrust Division could remark that he looked upon IP policy speeches as "a way to atone for the sins" of the earlier approach and of the Nine No Nos themselves.[817] The rapprochement of antitrust and IP continued with the 1995 Antitrust Guidelines for the Licensing of Intellectual Property, which stated that "[t]he intellectual property laws and the antitrust laws share the common purpose of promoting innovation and enhancing consumer welfare," a statement that the revised Guidelines repeated verbatim in 2017.[818] Today, none of the Nine No Nos is *per se* illegal: indeed, none is even presumptively unlawful.

Perspectives on the right relationship between antitrust and IP vary considerably. Some argue that the policy concerns underpinning the intellectual property laws require particular deference in cases involving IP rights; others argue that antitrust should apply with equal—or even particular—force in cases involving rights of this kind. In the following two extracts, a recent Antitrust Division head makes the case for some antitrust deference in the presence of IP rights, and an antitrust scholar makes the case for antitrust's equal (or perhaps greater?) dignity.

Makan Delrahim, The "New Madison" Approach to Antitrust and Intellectual Property Law

Remarks of March 16, 2018

[1] The exchanges between Jefferson and Madison on the question of patent rights in 1788 are . . . illuminating of Madison's intellectual influence. Reflecting the general anti-monopoly sentiment at the time, Jefferson wrote from his post in Paris that "the benefit even of limited monopolies is too doubtful to be opposed to that of their general suppression."

[2] In response, Madison acknowledged that monopolies "are justly classed among the greatest nuisances in Government." But he recognized a limited exception for patents. "[I]s it clear," he asked Jefferson, "that as encouragement to literary works and ingenious discoveries, [monopolies] are not too valuable to be wholly renounced?" Madison answered his own question, demonstrating a nuanced understanding of how to balance concerns about monopolies with creating incentives to innovate: "Monopolies are sacrifices of the many to the few. . . . Where the power . . . is in the many not in the few, the danger can not be very great that the few will be thus favored. It is much more to be dreaded that the few will be unnecessarily sacrificed to the many." [. . .]

[3] There has been a shift in recent years toward what I would call a "retro-Jefferson" view of patents as conferring too much power that ought to be curbed, either through reinterpreting antitrust law or establishing patent policies of standard setting organization ("SSO") that favor implementers who practice on a patent when they build new technologies. Many advocates of reducing the power of intellectual property rights cite the so-called "hold-up" problem in the context of SSOs. As many of you know, I believe these concerns are largely misplaced. Instead, I favor what I call the "New Madison" approach to the application of antitrust law to intellectual property rights.

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815 *See* Abbott B. Lipsky Jr., *Current Antitrust Division Views on Patent Licensing Practices*, 50 Antitrust L.J. 515 (1981), *passim*, quoting Bruce Wilson, Department of Justice Luncheon Speech, *Law on Licensing Practices: Myth or Reality?* (Jan. 21, 1975).

816 Abbott B. Lipsky Jr., *Current Antitrust Division Views on Patent Licensing Practices*, 50 Antitrust L.J. 515 (1981) (repudiating the No Nos); Richard Gilbert & Carl Shapiro, *Antitrust Issues in the Licensing of Intellectual Property: The Nine No-No's Meet the Nineties*, Brookings Papers: Microeconomics (1997); William D. Coston, *The Patent-Antitrust Interface: Are There Any No-No's Today?*, Venable LLP White Paper (Jan. 2013).

817 Charles F. Rule, *The Administration's Views: Antitrust Analysis After the Nine No-No's*, 55 Antitrust L.J. 365 (1986)

818 U.S. Dept. of Justice & Federal Trade Commission, ANTITRUST GUIDELINES FOR THE LICENSING OF INTELLECTUAL PROPERTY (Apr. 6, 1995); U.S. Dept. of Justice & Federal Trade Commission, ANTITRUST GUIDELINES FOR THE LICENSING OF INTELLECTUAL PROPERTY (Jan. 12, 2017).

[4] The New Madison approach, if I may, has four basic premises that are aimed at ensuring that patent holders have adequate incentives to innovate and create exciting new technologies, and that licensees have appropriate incentives to implement those technologies.

[5] First, hold-up [of companies by patent holders for royalties reflecting the sunk value of their investments] is fundamentally not an antitrust problem, and therefore antitrust law should not be used as a tool to police . . . commitments that patent-holders make to standard setting organizations [to license their IP on fair, reasonable, and nondiscriminatory ("FRAND") terms].

[6] Second, standard setting organizations should not become vehicles for concerted actions by market participants to skew conditions for patented technologies' incorporation into a standard in favor of implementers because this can reduce incentives to innovate and encourage patent hold-out.

[7] Third, because a key feature of patent rights is the right to exclude, standard setting organizations and courts should have a very high burden before they adopt rules that severely restrict that right or—even worse—amount to a de facto compulsory licensing scheme.

[8] Fourth, consistent with the fundamental right to exclude, from the perspective of the antitrust laws, a unilateral and unconditional refusal to license a patent should be considered per se legal. [. . .]

[9] The third premise of the New Madison approach to antitrust law and intellectual property is to respect the core of what it means to hold an IP right—namely, the right to exclude. In his letters to Thomas Jefferson, Madison acknowledged that state-conferred monopolies are "among the greatest nuisances in government," but maintained that these "nuisances" could be harnessed to serve the greater good of social progress and innovation through patent protection. His analogy of patents to the "common law . . . copyright of authors" in The Federalist Papers is telling because, at the time, the copyright of authors was understood as a property right. Equipping patent holders with the property right to exclude therefore goes hand-in-hand with the goals Madison envisioned for the U.S. patent regime.

[10] Understanding patent rights, once conferred, as a form of property right helps frame the current debate over injunctions, and demonstrates how far we've strayed off course. . . . In a worrisome trend, some commentators have suggested that the mere act of seeking an injunction order to prevent infringement [of a patent that has been incorporated into an industry standard] raises competition concerns, and, with a degree of hubris litigants have advanced such theories as a basis for antitrust liability. Taken together, these trends fundamentally transform the nature of patent rights away from their constitutional underpinnings. They convert a property rule into a liability rule, and amount to a troubling de facto compulsory licensing scheme. It is not difficult to understand why that is the case, particularly in the context of standard setting. If a patent holder effectively loses its right to an injunction whenever a licensing dispute arises, or is deterred from seeking an injunction due to the prospect of treble damages, an implementer can freely infringe, knowing that the most he or she will eventually have to pay is a reasonable royalty rate. Implementers have a strong incentive to pursue this course while holding out from taking a license due to the high injunction bar for innovators that make [commitments to a standard-setting organization to license their IP on FRAND terms]. It is a harmful arbitrage that should be discouraged.

[11] . . . Deterring the right to enjoin other parties from infringement—particularly competitors—seriously reduces incentives to innovate, much in the same way that the DOJ's enforcement policies in the 1970s prevented field of use restrictions in patent licensing. This can cause great harm to consumers, and is particularly problematic as more and more products and services come to depend on standardized technology.

[12] . . . [T]he fourth premise of the "New Madison" approach . . . is that a unilateral and unconditional refusal to license a valid patent should be per se legal. A refusal to license should not be a source for a competitor or customer to seek treble damages under the Sherman Act. That is because competition and consumers both benefit when inventors have full incentives to exploit their patent rights.

[13] This requires an assurance to inventors that they need not subsidize their competitors' business models if they prefer not to do so. The Supreme Court clarified as much in *Trinko*, explaining that a refusal to deal is not

an antitrust violation if the parties have never done business with each other, because "there is no duty to aid competitors." A de facto compulsory licensing scheme turns this policy underlying the Sherman Act on its head.

[14] To that end, I urge scholars and policymakers to give careful consideration to the underlying policies of the *Trinko* decision. The Supreme Court emphasized that its earlier *Aspen Skiing* decision was merely a "limited exception" to the rule that there is no duty to deal under the antitrust laws. But some, particularly some of the newer enforcement agencies abroad, may think the "exception" leaves room for a licensee to bring an antitrust suit if a patent holder terminates or refuses to renew the licensing agreement. The licensor thus could be forced to litigate for years the consequences of a business decision stemming from changed competitive dynamics or a new licensing strategy. Antitrust laws should not be used to transform an inventor's one-time decision to offer a license to a competitor into a forever commitment that the inventor will continue licensing that competitor in perpetuity

Herbert Hovenkamp, The Antitrust-Intellectual Property Interface

ABA Section of Antitrust Law, 3 ISSUES IN COMPETITION LAW AND POLICY (2008)

Ever since the antitrust laws were passed, antitrust and IP have had to accommodate one another, but they have done so in different ways in different periods. The early twentieth century was an era of IP expansion and antitrust accommodation. During this period even when the Supreme Court saw fit to make IP yield, it frequently did so on "misuse" rather than antitrust grounds. {*Eds.: the "patent misuse" doctrine is a doctrine of IP law, not antitrust, that limits efforts to assert exclusive rights beyond the scope of a patent.*} By contrast, beginning during the New Deal and extending through the Warren era, the Supreme Court was more inclined to view patents as inherently anticompetitive and to interpret the antitrust laws expansively. The result was overly aggressive and sometimes even silly antitrust rules, such as those for patent ties, that found antitrust violations when the defendant had no real power and there was no realistic prospect of economic harm.

Today, we once again live in an era of IP expansionism. Indeed, the IP laws, particularly the Copyright Act, bear the marks of significant special interest capture. The result is provisions that are much more likely to protect IP holders' profits than to serve the constitutional purpose of the IP laws, which is to encourage innovation by searching for the right balance between the right to exclude and the need of every innovator to build on the work of others. By contrast, antitrust over the last three decades has become much more focused on protecting consumer welfare, neoclassically defined, and interest groups have had considerably less success in obtaining special interest legislation. As a result, application of the antitrust laws is more likely to serve the public interest than application of at least many IP provisions. This counsels against overly expansive interpretations of IP rights in the face of serious complaints of competitive harm.

At the policy level, antitrust is a more coherent enterprise than the IP regimes. While the point can certainly be exaggerated, the fact is that the neoclassical model of competition has become robustly established in both the antitrust academy and the federal judiciary. Courts have become far better at distinguishing anticompetitive practices from those that are procompetitive or harmless. While plenty of problems of administration remain, most of them have to do with the details of antitrust enforcement rather than its core policy.

IP policy cannot make the same set of claims. Most importantly, it lacks an empirically useable model for identifying the appropriate duration and scope of IP rights. An optimal IP policy would seek to maximize the social returns from innovation, less the costs of any monopoly output reductions and related dislocations that result, plus the costs of using the IP system, including the costs of identifying IP rights and negotiating licenses. Determining the optimal amount of protection is incredibly difficult. For example, as the scope and strength of IP rights increases, people have a greater incentive to innovate insofar as anticipated returns to completed innovations are greater, but a reduced incentive insofar as it becomes more costly to borrow the ideas of others. Further, while the IP statutes are largely general, optimal coverage almost certainly varies from industry to industry. For example, a shorter period of copyright protection for computer code would almost certainly further innovation in that market. The market life of computer code is a few years at the most. Under the current regime, there is no realistic chance that copyrighted code will ever enter the public domain while it has

economic life remaining. Largely because of this uncertainty, the IP laws have become a playground for special interests, who have remarkable and generally unprecedented control over congressional agendas.

Of course, special interest capture of IP regimes is not a problem to be addressed under the antitrust laws, but rather by educating Congress and convincing courts to take legislative capture into account when interpreting statutes. At the same time, however, the current regime of unduly expansionist IP provisions and a decently grounded antitrust policy suggest that antitrust should not be as cautious as it has been in the past. When a challenged practice poses a true threat to competition and is not expressly permitted by the IP statutes, courts are well advised to err on the side of promoting the short-run competitive interests recognized in antitrust, rather than the cacophony of voices reflected in the IP laws.

* * *

Antitrust-IP cases arise in a range of settings. They may arise in government antitrust enforcement actions; in private antitrust claims brought by consumers (including as a class) or by competitors; as antitrust counterclaims to infringement suits brought by rightsholders against alleged infringers; or as challenges by licensees to terms and conditions demanded by licensors.

But we can group antitrust's most important engagements with intellectual property into three broad categories. First, in a very small number of circumstances, the acquisition and/or assertion of intellectual property rights may itself be challenged under the antitrust laws. This includes, for examples, mergers and acquisitions that involve the acquisition of IP portfolios; unilateral refusals to license intellectual property rights; and antitrust challenges to the mere assertion of IP rights. Second, a range of agreements and joint practices involving IP may be challenged as antitrust violations, from licensing agreements to settlements of infringement litigation. Third, antitrust has often been invoked in connection with the use and licensing of so-called "standard-essential patents" ("SEPs"): that is, patent rights over technologies that have been incorporated into standards adopted by standard-setting organizations ("SSOs").

In this chapter we will visit each of these theaters in turn. In Section B we will consider the antitrust analysis of the acquisition and assertion of IP rights. In Section C we will consider agreements and joint practices. Finally, in Section D we will encounter the standard-setting process and some aspects of its engagement with antitrust, including antitrust's complex relationship with so-called "FRAND commitments."

NOTES

1) In what ways are antitrust and IP in tension? Can you think of some concrete settings in which the goals of the IP laws and the goals of antitrust may be at odds for an antitrust agency, or for a court hearing an antitrust case? What guideposts can agencies and courts use to navigate that tension?
2) How, if at all, should antitrust's relationship with intellectual property differ from its relationship with other forms of property?
3) In what sense is it true, as the 1995 and 2017 IP Guidelines suggest, that both IP and antitrust law aim to maximize "consumer welfare"? Can you articulate a plausible and appealing alternative vision?
4) IP rights are premised in large part on the belief that IP rights incentivize innovation that leads to dynamic competition, resulting in far greater social benefit than the harms those rights create. Do you think that is a correct premise? How would we test whether it were true or false?
5) Do you agree with the holding in *Independent Ink*? Would a weak (*i.e.*, easily rebutted) presumption of market power have been a better or worse solution than the one articulated by the Court?
6) What is the basis for thinking that the innovation that the IP laws protect is more socially valuable than the innovation that those laws suppress?
7) As you read through this Chapter, consider whether antitrust law has developed a consistent account of its relationship to IP rights. Is such an account possible or desirable? Do we need a "theory" of antitrust's relationship to other bodies of law—and if so, which ones?
8) Are all IP rights equally worthy of antitrust deference, or are some more worthy than others?
9) How would you assess the antitrust risk of the Nine No Nos today?

10) What do you make of the claim in the previous extract that the intellectual-property laws have been more vulnerable to capture by special interests than the antitrust laws? Is antitrust enforcement vulnerable to capture?

B. Acquisition and Assertion of Intellectual Property

In certain circumstances, an agency or plaintiff might challenge the mere acquisition and assertion of intellectual property rights as a violation of the antitrust laws.[819] In this section we will consider three categories of such circumstances: mergers and acquisitions involving intellectual property; unilateral refusals to license intellectual property; and various forms of alleged "abuse" of the patent system, including "patent thicketing," "patent trolling," and "product hopping."

1. IP Issues in Merger Review

In some industries, intellectual property is critical to competitive effectiveness. Patented technology, for example, may be the key to a critical competitive advantage over rivals, and—where there are few or no substitutes for the protected technology—ownership of one or more patents may even confer market or even monopoly power. In such industries, merger analysis may involve a close focus on the parties' respective IP rights.

Nowhere is this clearer than in the pharmaceutical industry, where intellectual property often defines the competitive landscape. To simplify considerably, we can think of pharmaceutical competition as involving two main groups of businesses: "branded" businesses, which make massive investments in research and development and launch patent-protected drugs; and "generic" businesses, which market unpatented versions of existing branded drugs, generally at lower price points than branded drugs. Generic entry becomes possible once the patents have expired or have been shown to be invalid or not infringed by the relevant product, or pursuant to an agreement with the patent holder.

Competition among pharmaceutical drugs often takes place in narrow markets, with individual drugs tailored to highly specific clinical indications.[820] As a result, a branded drug may enjoy significant market power for the duration of its patent, with that power eroding considerably when the patent expires (or is invalidated) and generic entry begins.

As you might expect, generic drugs are typically priced much lower than their branded equivalents.[821] Interestingly, the entry of additional generic competitors after the first appears to have significant price effects, as a recent FDA study indicated. A recent FDA report found that successive entry by generics reduced prices until as many as nine generics were in the market. [822] (Generic entry sometimes causes an *increase* in the branded drug's own price: can you think of a reason why this might be?[823])

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819 *See*, *e.g.*, FTC, PATENT ASSERTION ENTITY ACTIVITY: AN FTC STUDY (Oct. 2016) 18 n.55 ("[T]he antitrust laws may forbid patent acquisitions or patent assertions that harm competition."). *See also* Fiona M. Scott Morton & Carl Shapiro, *Strategic Patent Acquisitions*, 79 Antitrust L.J. 463 (2014).

820 *See*, *e.g.*, In re Nexium Antitrust Litig., 968 F. Supp. 2d 367, 388-89 (D. Mass. 2013) (properly constituted market may be comprised of single product; lower courts have ruled that both brand-name drug and its generic analogs can constitute a relevant antitrust market) (internal citation omitted); In re Brand Name Prescription Drugs Antitrust Litig., 186 F.3d 781, 787 (7th Cir. 1999) ("It would not be surprising . . . if every manufacturer of brand name prescription drugs had some market power.")

821 Congressional Budget Office, *How Increased Competition from Generic Drugs Has Affected Prices and Returns in the Pharmaceutical Industry* (July 1998) 28 ("Generics . . . cost one-fourth less than the brand-name drugs, on average, at retail prices.").

822 Ryan Conrad & Randall Lutter, FDA, *Generic Competition and Drug Prices: New Evidence Linking Greater Generic Competition and Lower Generic Drug Prices* (December 2019).

823 Hint: who buys branded drugs after a low-cost generic is available? *See* Congressional Budget Office, *How Increased Competition from Generic Drugs Has Affected Prices and Returns in the Pharmaceutical Industry* (July 1998) 29; Richard G. Frank & David S. Salkever, Generic Entry and the Pricing of Pharmaceuticals, 6 J. of Econ. & Mgmt Strategy 75 (Spring 1997); Henry Grabowski & John M. Vernon, *Brand Loyalty, Entry and Price Competition In Pharmaceuticals After the 1984 Drug Act*, 35 J. L. & Econ. 331, 340 (1992).

The Hatch-Waxman Act

The promotion of generic competition in pharma markets and the fostering of innovation were key objectives of the Hatch-Waxman Act, which was enacted in 1984 to stimulate competition in drug markets,[824] and amended in 2003.[825] There is a rich literature on Hatch-Waxman and its complex relationships with competition and antitrust.[826]

Among other things, Hatch-Waxman created a method for generic manufacturers to obtain accelerated approval from the Food and Drug Administration ("FDA") for their drugs, via an FDA filing known as an Abbreviated New Drug Application ("ANDA"). As part of that process, the filer of an ANDA must demonstrate that its drug is identical or equivalent in several important respects to an already-approved drug, as an alternative to conducting its own clinical studies of safety and effectiveness. It must also make a certification regarding the existence of patent rights, explaining how generic entry would not infringe any valid, unexpired patents. Among other alternatives, it may do so through a "Paragraph IV" certification stating that the patent for an already-approved branded drug is either not infringed or is invalid. Upon such a certification, the patent holder may file an infringement suit against the ANDA filer: if it does so within 45 days, the approval of the ANDA is stayed for a period of up to 30 months to allow the patent issues to be resolved. During this period, the FDA will not approve another ANDA. The stay ends early (*i.e.*, before the expiration of the 30-month period) if the relevant patents expire or a court determines that they are invalid or not infringed.

Many patent claims do not survive the test of Paragraph IV litigation: remarkably, a 2002 FTC study noticed that the generic applicant prevailed in 73% of the cases in which a court was required to adjudicate the validity and infringement of relevant patents.[827] (Of course, this is only a subset of the cases in which the Paragraph IV filing is made.)

In order to induce entry and to encourage challenges to weak patents, the first generic company to file an ANDA with a Paragraph IV certification is guaranteed 180 days of marketing exclusivity—that is, without competition from other generics—after launch. The profit available during this time may constitute a sizeable incentive.

Hatch-Waxman is widely understood to have stimulated generic entry in many pharmaceutical markets, and to have affected pharma competition in a variety of ways—not all of which were intended by the drafters.[828] As Scott Hemphill and Mark Lemley argued in 2011: "Pharmaceutical patent owners have responded to Hatch-Waxman with a sophisticated program of 'product lifecycle management,' which is code for finding ways to extend exclusivity as long as possible. They have filed multiple patents on variants of the same drug, listed patents with the FDA that don't cover the product, taken advantage of litigation rules to stay generic entry, and 'product-hopped' (made small changes to a product timed to prevent generic entry). Most of all, they have paid

[824] 21 U.S.C. § 355 *et seq.*

[825] Medicare Prescription Drug, Improvement, and Modernization Act of 2003.

[826] *See*, *e.g.*, C. Scott Hemphill & Mark A. Lemley, *Earning Exclusivity: Generic Drug Incentives and the Hatch-Waxman Act*, 77 Antitrust L.J. 947 (2011); Jaime F. Cardenas-Navia, *Thirty Years of Flawed Incentives: An Empirical and Economic Analysis of Hatch-Waxman Patent-Term Restoration*, 29 Berkeley Tech. L.J. 1301 (2014); Elizabeth Stotland Weiswasser & Scott D. Danzis, *The Hatch-Waxman Act: History, Structure, and Legacy*, 71 Antitrust L.J. 585 (2003).

[827] FTC, GENERIC DRUG ENTRY PRIOR TO PATENT EXPIRATION: AN FTC STUDY (July 2002) vi & n.8.

[828] *See*, *e.g.*, FTC, GENERIC DRUG ENTRY PRIOR TO PATENT EXPIRATION: AN FTC STUDY (July 2002) i ("Beyond any doubt, Hatch-Waxman has increased generic drug entry. Generic drugs now comprise more than 47 percent of the prescriptions filled for pharmaceutical products – up from 19 percent in 1984, when Hatch-Waxman was enacted. In spite of this record of success, two of the provisions governing generic drug approval prior to patent expiration (the 180-day exclusivity and the 30-month stay provisions) are susceptible to strategies that, in some cases, may have prevented the availability of more generic drugs. These provisions continue to have the potential for abuse."); Elizabeth Stotland Weiswasser & Scott D. Danzis, *The Hatch-Waxman Act: History, Structure, and Legacy*, 71 Antitrust L.J. 585, 607 (2003) ("Of the most frequently prescribed drugs on the market with expired patents, the share that have a generic competitor on the market has increased from 36 percent in 1984 to nearly 100 percent today.").

their potential generic competitors to abandon their challenges, keeping weak patents intact and preventing competition."[829]

We will consider the antitrust analysis of some of these practices below.

As you can imagine, the narrow-market nature of pharma competition and the centrality of patent rights have significant implications for the evaluation of mergers in the pharmaceutical industry. Such mergers are generally reviewed by the FTC's Mergers I division: generally, the Commission identifies "overlapping" product lines and requires divestiture of those products before allowing the rest of the transaction to proceed. Note that a relevant competing product may be already on the market or merely in a development pipeline: the agency prefers divestiture of the on-market product rather than the one in development.[830] (Why do you think that is?)

The standard modern approach is exemplified by the FTC's analysis of the Teva / Allergan merger, which consolidated the first and third-largest generic pharmaceutical manufacturers in the United States. As the following statement explained, the FTC applied not only the traditional approach: it also considered other theories of harm to competition.

Statement of the FTC, In the Matter of Teva Pharmaceuticals Industries Ltd. and Allergan plc

FTC Dkt No. C-4589 (July 27, 2016)

[1] Both Teva and Allergan are global pharmaceutical companies that are among the largest suppliers of generic pharmaceuticals in the United States. Teva is currently the largest generic drug company in the United States, with an overall generic market share of approximately 13%; Allergan is third, accounting for approximately 9% of generic sales. Although this merger combines two large sellers of generic drugs, the generic pharmaceutical industry as a whole remains relatively unconcentrated. Over two hundred firms sell generic drugs in the United States and the five largest suppliers account only for about half of overall generic sales. Following this transaction, the combined firm will likely have a 22% share of industry-wide sales across all generic product markets.

[2] Despite the industry's relatively low concentration, the Commission appreciates that the price, quality, and availability of generic pharmaceutical products have a significant impact on American consumers' daily lives and on healthcare costs nationwide. We therefore looked closely at every possible aspect of this transaction that could result in competitive harm. We examined not only particular product overlaps but also whether the combination between Teva and Allergan would result in other adverse consequences to competition. Our comprehensive investigation included the review of extensive documents from the merging parties and other industry players as well as interviews with dozens of customers and more than 50 competitors. We concluded that the substantial divestitures required by the consent order resolve the competitive concerns resulting from the transaction.

[3] As detailed in our complaint, we have reason to believe that, absent a remedy, the transaction would likely substantially reduce competition in 79 markets for pharmaceutical products, including oral contraceptives, steroidal medications, mental health drugs, and many other products. These markets include individual strengths of pharmaceutical products where Teva and Allergan currently offer competing products as well as products where there would likely be future competition absent the merger because one or both of the parties are developing competing products. To remedy the likely anticompetitive effects in each of the relevant markets, the consent order requires the divestiture of the products and related assets to specific acquirers that the Commission has closely vetted and approved. Where at least one dosage strength raised a competitive concern, we required Teva to divest all strengths. These divestitures, and the other relief contained in the proposed consent order, are designed to maintain competition in the relevant markets. [. . .]

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[829] C. Scott Hemphill & Mark A. Lemley, *Earning Exclusivity: Generic Drug Incentives and the Hatch-Waxman Act*, 77 Antitrust L.J. 947, 948 (2011).

[830] D. Bruce Hoffman, *It Only Takes Two to Tango: Reflections on Six Months at the FTC* (remarks of Feb. 2, 2018) 6–7.

[4] In assessing whether the combination of the parties' generic businesses would harm competition or create a firm with a greater ability to engage in anticompetitive conduct, we evaluated three additional potential theories of harm beyond individual product overlaps.

[5] First, we considered whether the merger would likely lead to anticompetitive effects from the bundling of generic products. Although both Teva and Allergan have broad generic drug portfolios today, the evidence did not show that the breadth of their portfolios significantly affects their ability to win business in individual drug product markets. Nor have they been able to use their portfolios to foreclose smaller competitors. Even with one of the broadest generic product portfolios in the industry, Teva's overall share of U.S. generic prescriptions has steadily declined from 2010 to 2015, and the share of total prescriptions filled by the five largest generic suppliers has similarly fallen during this period. Generic sales occur at the individual product level, and customers sometimes even break up purchases by specific strengths to obtain more favorable pricing. As a result, smaller firms with much smaller portfolios compete head-to-head against larger generic firms and are the leading suppliers in the markets for many individual generic treatments. Additionally, purchasers actively seek to diversify their supplier base by sourcing from smaller suppliers. On the facts here, we concluded that anticompetitive effects arising from the merged company's portfolio of products are unlikely to occur.

[6] Second, we examined whether the merger would likely decrease incentives to challenge the patents held by brand-name pharmaceutical companies and bring new generic drugs to market. The regulatory framework governing generic pharmaceuticals, the Hatch-Waxman Act, provides specific procedures for identifying and resolving patent disputes related to new generic drugs. Under the Hatch-Waxman Act, a company seeking to introduce a new generic drug may file what is commonly known as a "Paragraph IV challenge" to a brand-name pharmaceutical product's patent. This filing triggers a process, including potential litigation, to resolve patent issues surrounding the proposed generic product's entry into the marketplace.

[7] We considered whether the merger would likely result in fewer or less effective Paragraph IV challenges, but the evidence did not support such a conclusion. A major incentive to file Paragraph IV challenges is the 180-day exclusivity period awarded to the first generic drug that the Food and Drug Administration approves in a market. The financial rewards associated with this "first-to-file" exclusivity period provide a strong incentive for generic drug companies of all sizes to challenge brand drug patents and litigate against brand drug companies. Indeed, first-to-file Paragraph IV challenges are not concentrated among a small group of firms. To the contrary, many firms, including small ones, have been active and successful first filers. In 2014, for example, twenty-five different companies were the first to file Paragraph IV challenges. For eight of those companies, that was their very first Paragraph IV challenge. Thus, while Teva and Allergan have actively filed Paragraph IV challenges, we found no evidence that either one has been better positioned to win the first-to-file race or that they have substantially greater incentives or ability to succeed in Paragraph IV challenges than many other generic companies. Nor did we see evidence that a merger between the two would diminish the combined firm's incentive to continue to pursue Paragraph IV challenges.

[8] Finally, we analyzed whether the proposed transaction might dampen incentives to develop new generic products. For example, certain types of generic drugs are especially difficult to develop. For the most part, however, the parties' in-house technical capabilities to develop complex generic drugs do not overlap. And to the extent that there are complex products for which both companies have engaged in development efforts, we found that there are a number of other firms with similar capabilities such that the transaction would not substantially lessen competition. Moreover, generic firms, including the merging parties, often partner with third parties (e.g., specialized contract development and manufacturing organizations) to obtain the technical capability to develop complex generic drugs. These types of partnership options will remain after the merger. The consent order addresses individual markets where the merger was likely to harm competition, including markets for difficult-to-develop products that are currently in the parties' pipelines.

[9] We therefore concluded that the proposed merger is unlikely to produce anticompetitive effects beyond the markets discussed above. That conclusion is necessarily limited to the facts of this case. Another set of facts presented by a different transaction might lead us to find that there are competitive concerns that extend beyond markets for individual pharmaceutical products.

* * *

The standard market-by-market approach to pharma merger enforcement has drawn criticism for being unduly narrow, and perhaps missing broader harms to competition.[831] But it is not clear what plausible alternatives exist, given the market-based nature of antitrust analysis. In 2021, the FTC announced the formation of a Pharmaceutical Task Force to reconsider enforcement policies in pharma markets.[832] The Task Force completed its main work in 2022, and the FTC has not yet announced any major revisions to its approach. One arguable, if modest, exception is the agency's assertion in 2023 of a bundling theory of harm in connection with the Amgen / Horizon transaction: the concern was resolved by consent decree.[833]

The debate was exemplified in 2019 when Bristol-Myers Squibb, a major pharmaceutical manufacturer, sought to purchase Celgene, a manufacturer focused on drugs for cancer and inflammatory diseases, for $74 billion. The FTC applied the standard approach and required the parties to divest Celgene's market-leading psoriasis drug Otezla. At $13.4 billion, this was the largest merger divestiture that the federal government had ever required in a merger case.[834]

Analysis Of Agreement Containing Consent Orders to Aid Public Comment, In the Matter of Bristol-Myers Squibb Company and Celgene Corporation

FTC File No. 191-0061 (Nov. 15, 2019)

[1] Headquartered in New York City, BMS researches, develops, manufactures, and sells prescription pharmaceutical products and biologic products in several therapeutic areas, including oncology, cardiology, virology, and inflammatory diseases. Among other products, BMS is developing an oral product to treat moderate-to-severe psoriasis. Like BMS, Celgene researches, develops, manufactures and sells prescription pharmaceutical products in the United States. Celgene markets eight products, including an oral treatment for moderate-to-severe psoriasis.

[2] Psoriasis is a chronic skin disease caused by an overactive immune system. The disease causes skin cells to multiply faster than normal and leads to a build-up of cells on the skin surface, forming bumpy red patches that are covered with white scales, known as plaques. The plaques can appear anywhere on the body, although they are most commonly found on the scalp, elbows, knees, and lower back. The severity of psoriasis (mild, moderate, or severe) is determined based upon the percentage of body surface area affected and the parts of the body that are affected. Typically, mild psoriasis covers less than 3 percent of the body, moderate psoriasis covers 3 to 10 percent of the body and severe psoriasis covers more than 10 percent of the body.

[3] When deciding how to treat psoriasis, dermatologists typically evaluate the severity of the disease, any risk factors or contraindications for the patient, and the patient's preferences. Dermatologists consider efficacy data, safety data, and side effect profile of each product, as well as mode of administration to select the appropriate treatment course for their patients. While many injectable and infused products are approved to treat moderate-to-severe psoriasis, a number of patients object to such injections or find them inconvenient. For those patients, dermatologists often select an oral product.

[4] Celgene's apremilast, marketed under the brand name Otezla, is a phosphodiesterase inhibitor. Otezla is the most popular oral product approved to treat moderate-to-severe psoriasis in the United States. Several older oral generic products, including methotrexate and acitretin, are approved by the U.S. Food and Drug Administration ("FDA") to treat psoriasis that does not respond to light, topical agents, and other forms of therapy. These drugs are still occasionally used in the treatment of psoriasis, but most doctors have moved to

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831 *See*, *e.g.*, Diana L. Moss, American Antitrust Institute, *From Competition To Conspiracy: Assessing The Federal Trade Commission's Merger Policy in The Pharmaceutical Sector* (Sept. 2020).

832 Pharmaceutical Task Force, Project No. P212900 (Docket No. FTC-2021-0025).

833 *See* FTC, Press Release, *Biopharmaceutical Giant Amgen to Settle FTC and State Challenges to its Horizon Therapeutics Acquisition* (Sept. 1, 2023).

834 *See* Press Release, FTC Requires Bristol-Myers Squibb Company and Celgene Corporation to Divest Psoriasis Drug Otezla as a Condition of Acquisition (Nov. 15, 2019).

prescribing newer agents with better efficacy, better safety, or a more favorable side effect profile for patients with moderate-to-severe psoriasis who desire an oral treatment. BMS is developing BMS 986165, an oral, selective tyrosine kinase 2 inhibitor that is the most advanced oral treatment in development for moderate-to-severe psoriasis.

[5] The United States is the relevant geographic market in which to assess the competitive effects of the proposed Acquisition. Oral products to treat moderate-to-severe psoriasis are prescription pharmaceutical products and regulated by FDA. As such, products sold outside the United States, but not approved for sale in the United States, do not provide viable competitive alternatives for U.S. consumers.

[6] The proposed Acquisition would likely result in substantial competitive harm to consumers in the market for oral products to treat moderate-to-severe psoriasis. Celgene is currently the market leader and BMS would likely be the next entrant into the market. Upon entry, BMS 986165 likely will compete directly with, and take sales from, Otezla.

[7] Entry in the relevant market would not be timely, likely, or sufficient in magnitude, character, and scope to deter or counteract the anticompetitive effects of the proposed Acquisition. New entry would require significant investment of time and money for product research and development, regulatory approval by the FDA, developing clinical history supporting the long-term efficacy of the product, and establishing a U.S. sales and service infrastructure. Such development efforts are difficult, time-consuming, and expensive, and often fail to result in a competitive product reaching the market.

[8] The Consent Agreement eliminates the competitive concerns raised by the proposed Acquisition by requiring BMS and Celgene to divest Celgene's worldwide Otezla business, including its regulatory approvals, intellectual property, contracts, and inventory to Amgen. BMS and Celgene also must transfer all confidential business information, research and development information, regulatory, formulation, and manufacturing reports related to the divested products, as well as provide access to employees who possess or are able to identify such information. Additionally, to ensure that the divestiture is successful and to maintain continuity of supply, the proposed Order requires BMS and Celgene to supply Amgen with Otezla for a limited time while Amgen establishes its own manufacturing capability. The provisions of the Consent Agreement ensure that Amgen becomes an independent, viable, and effective competitor in the U.S. market.

Dissenting Statement of Commissioner Rohit Chopra, In the Matter of Bristol-Myers Squibb Company and Celgene Corporation

FTC File No. 191-0061 (Nov. 15, 2019)

[1] When it comes to life-saving pharmaceuticals, the Federal Trade Commission should never ignore serious warning signs that most Americans see clearly. Many of us depend on prescription drugs to survive, but too many cannot afford the high costs. The argument that sky-high prices are necessary for innovation has been falling apart, as more evidence reveals that many new drugs seem to be designed to extend exclusivity, rather than providing meaningful therapeutic benefits.

[2] Predicting the anticompetitive effects of massive mergers in any industry is difficult. This is especially true in pharmaceuticals, where research and discovery are core to competition. Some evidence shows that these mergers have choked off innovation, creating harms that are immeasurable for those waiting for a cure.

[3] Over the years, the agency has worked to combat abuse of intellectual property and other anticompetitive conduct by pharmaceutical companies, achieving major victories in courts across the country. Our approach to pharmaceutical mergers, however, has focused primarily on reaching settlements, rather than litigation or in-depth merger studies. The agency has focused on seeking divestitures of individual products, usually to another major pharmaceutical player.

[4] There have been longstanding, bipartisan concerns about whether this strategy is truly working. For example, in 2005, as he reflected on his six years of service as Commissioner, Thomas Leary lamented that the

agency's approach to these investigations mostly stayed the same, despite overarching concerns about other anticompetitive harms.

[5] During my time as a Commissioner, I have pushed for the agency to be more rigorous across all of our work by opening our eyes to new types of analysis and sources of evidence, while avoiding assumptions that may be outdated. Given some of the clear warning signs in the industry, we must approach our investigations of pharmaceutical mergers with careful scrutiny and great humility about our longstanding practices.

[6] This massive $74 billion merger between Bristol-Myers Squibb and Celgene may have significant implications for patients and inventors, so we must be especially vigilant. In my view, this transaction appears to be heavily motivated by financial engineering and tax considerations (as opposed to a genuine drive for greater discovery of lifesaving medications), without clear benefits to patients or the public. The buyer's incentives might also be distorted, given overlaps in ownership. In addition, there are also concerns about a history of anticompetitive conduct. Expansive investigation for mergers like these is time well spent.

[7] Again, with a few exceptions, many FTC Commissioners have primarily scrutinized pharmaceutical mergers based on an examination of whether there are any product overlaps between the merging corporations, or where there may be clear-cut incentives to foreclose rivals with the ability to compete. When there are no obvious overlaps or foreclosure possibilities, the Commission typically does not challenge any aspect of the transaction.

[8] I am deeply skeptical that this approach can unearth the complete set of harms to patients and innovation, based on the history of anticompetitive conduct of the firms seeking to merge and the characteristics of today's pharmaceutical industry when it comes to innovation. Will the merger facilitate a capital structure that magnifies incentives to engage in anticompetitive conduct or abuse of intellectual property? Will the merger deter formation of biotechnology firms that fuel much of the industry's innovation? How can we know the effects on competition if we do not rigorously study or investigate these and other critical questions? Given our approach, I am not confident that the Commission has sufficient information to determine the full scope of potential harms to competition of this massive merger.

Dissenting Statement of Commissioner Rebecca Kelly Slaughter, In the Matter of Bristol-Myers Squibb Company and Celgene Corporation

FTC File No. 191-0061 (Nov. 15, 2019)

[1] The Federal Trade Commission has a long history of reviewing mergers between pharmaceutical manufacturers using an analytical framework that identifies specific product overlaps between the merging parties, including of drugs in development, and requiring divestitures of one of those products. This approach addresses significant competitive concerns in these mergers, but I am concerned that it does not fully capture all of the competitive consequences of these transactions.

[2] The consent decree in this case follows the Commission's standard approach. It remedies a serious concern about a drug-level overlap between BMS's development-stage BMS 986165 (or "TYK2") and Celgene's on-market Otezla for the treatment of moderate-to-severe psoriasis. This is important, and I support the Commission's effort to remedy this drug-level overlap. However, I remain concerned that this analytical approach is too narrow. In particular, I believe the Commission should more broadly consider whether any pharmaceutical merger is likely to exacerbate anticompetitive conduct by the merged firm or to hinder innovation.

[3] Several recent developments enhance my concerns. Branded drug prices have increased substantially in recent years, and pharmaceutical merger activity persists at a high pace. The high rate of drug company consolidation has coincided with a sea change in the structure of pharmaceutical research and development; recent studies suggest mergers may inhibit research, development, or approval in this changing environment. In addition, the pharmaceutical industry has long been the focus of anticompetitive conduct enforcement by both the Commission and private litigants, including for practices such as pay-for-delay settlements, sham litigation, and anticompetitive product hopping. We must carefully consider the facts in each specific merger to understand

whether or how it may facilitate anticompetitive conduct, and therefore be more likely to result in a substantial lessening of competition.

[4] Going forward, I hope the Commission will take a more expansive approach to analyzing the full range of competitive consequences of pharmaceutical mergers. I urge not only the Commission, but also researchers and industry experts to think carefully and creatively about these cases, and in particular to study the effects of recent consummated mergers on drug research, development, and approval. Outside of merger enforcement, we should also continue to police aggressively business practices that suppress competition. Indeed, as Commissioner Chopra and I have explained elsewhere, we should unleash the full scope of our authority under Section 5 to combat high drug prices.

[5] The problem of high drug prices is too important to leave any potential solutions unexhausted. As a society, we should also consider all other policy interventions that would help combat high drug prices.

Statement of Commissioner Noah Joshua Phillips, In the Matter of Bristol-Myers Squibb Company and Celgene Corporation

FTC File No. 191-0061 (Nov. 15, 2019)

[1] I write to address the dissenting statements issued by my colleagues, Commissioners Chopra and Slaughter.

[2] From these statements, a reader unfamiliar with the U.S. antitrust laws could be forgiven for gleaning several inaccurate conclusions. First, companies in the U.S. may not merge unless the antitrust enforcement agencies permit them to do so. Second, to stop a merger, the government need not provide any theory as to why a merger violates the law, nor any evidence to support that theory. Third, antitrust enforcement agencies can and should condemn mergers they cannot prove violate the law because the agencies deem the business justifications for the merger insufficient.

[3] The unfamiliar reader would be wrong on each count. That is not the law. (Nor, for that matter, is it sound policy.)

[4] The structural remedy agreed to by the merging parties in this case addresses every competition concern uncovered after an extensive investigation. Every one. But Commissioners Chopra and Slaughter still dissent. Why?

[5] Commissioner Chopra cites a study purporting to show that mergers "can choke off innovation." Okay. But how does this merger do that? Without an answer to that question, the logic is rather like saying an individual defendant is guilty of a crime because there is too much of that crime in society. Thank goodness that is not how our criminal justice system works.

[6] He next writes that we must approach our investigations of pharmaceutical mergers with careful scrutiny and with great humility. I agree completely. What I fail to see is how careful scrutiny and great humility lead to the conclusion, without any clearly articulated theory of liability or facts to support it, that this merger violates the law—or, again without any facts in support, that the remedy is inadequate.

[7] The next basis Commissioner Chopra offers for his dissent is his view that the merger is animated by financial and tax considerations, which he deems insufficient to justify the merger. Leaving aside the question of why he thinks the job of antitrust enforcers is to value-judge a merger beyond its impact upon competition, that gets the law precisely backwards. The parties get to merge unless we can show a harm to competition, not the other way round. [. . .]

[8] The dissenting commissioners both criticize the Commission's investigations of pharmaceutical mergers generally, expressing concern that they fail to capture all the harms to competition posed by such mergers. But, again, the most they offer is speculation about vaguely articulated harms, without reference to any evidence that this merger is likely to exacerbate them. Nor do the dissenters cite a previous case that resulted in anticompetitive effects that they insinuate the Commission missed. The dissenting statements mention various violations of the antitrust laws committed by firms in the pharmaceutical industry, but neither explains how this

merger makes such conduct more likely. For decades, the Federal Trade Commission has pursued enforcement against many different kinds of anticompetitive conduct in the pharmaceutical industry. That work, critical to controlling healthcare costs for Americans, will continue.

[9] Neither dissenting commissioner argues that the consent order and associated divestiture are bad for competition or consumers, or identifies any additional remedy they believe is warranted. And neither proposes any basis to sue to stop the merger.[3] So, again, why dissent? At the end of the day, we are left only with the sense that Commissioners Chopra and Slaughter feel the merger will threaten competition and wish to dissociate themselves with it. To me, that is not enough. (Even if it were, a vote to join Commissioners Chopra and Slaughter would result, at the end of the day, in the merger without the remedy. Are they calling on their colleagues to vote with them?)

[10] Returning to our unfamiliar reader, here is how the law actually works. First, to block a merger outright, U.S. antitrust enforcement agencies must convince a judge that it violates the law. In this country, where people and companies are free to do what they wish with their property subject to the constraints imposed by the law, our judges are somewhat hostile to the notion that we should block a merger when the parties have agreed to address every problem that we can identify. Second, we need to articulate a viable theory of harm to competition posed by the merger and produce evidence to support that theory. Third, our job is to enforce the antitrust laws, which guard against particular (competitive) harms that mergers may present. Other parts of the government guard against other harms posed by mergers, for example the Committee on Foreign Investment in the United States, which looks at certain investments for their potential impact on national security, or the Securities and Exchange Commission, which reviews transactions to protect investors. Our job is not to opine on whether a merger is "good" or "bad" for society as a whole, or to use our authority to make sure firms merge for reasons that someone might like (innovation) as opposed to reasons that they may not (tax).

[11] In reviewing the dissenting statements, readers—unfamiliar and otherwise—would do well to keep all of that in mind.

* * *

Pharma mergers are not the only ones in which IP plays a key role. In other industries, too, intellectual property rights may also be central to the competitive analysis of mergers. In some cases, an entire acquisition may be of a package of intellectual property: IP rights constitute assets within the meaning of Section 7 and, in appropriate cases, a pure IP transaction may give rise to competitive concerns.[835] In other cases, IP issues merely play a significant role in the context of a broader deal. For example, in 2008, the FTC challenged the proposed acquisition by Flow—a manufacturer of waterjet cutting systems—of its competitor OMAX. The FTC was particularly concerned that OMAX's broad patents would preclude competitive entry in competition with the

[3] In fairness, Commissioner Chopra does state his view that the agency should litigate to block more pharmaceutical mergers outright. But he fails to answer whether the Commission should litigate this case, and—more importantly—on what legal and factual basis. That is the question we face today.

[835] *See*, *e.g.*, Intel Corp. v. Seven Networks, LLC, 562 F. Supp. 3d 454, 464 (N.D. Cal. 2021) ("[T]he Court does not take issue with the general theory being put forward by Intel – *i.e.*, that aggregation of substitute patents could, in theory, harm competition in the same way as any merger or combination of competitors that lessens competition . . . The problem for Intel is that the SAC lacks sufficient facts to demonstrate the narrative has been carried out against the company, at least at this juncture."); U.S. Dept. of Justice, Press Release, CPTN Holdings LLC and Novell Inc. Change Deal in Order to Address Department of Justice's Open Source Concerns (Apr. 20, 2011) ("The Department of Justice announced today that in order to proceed with the first phase of their acquisition of certain patents and patent applications from Novell Inc., CPTN Holdings LLC and its owners have altered their original agreements to address the department's antitrust concerns. The department said that, as originally proposed, the deal would jeopardize the ability of open source software, such as Linux, to continue to innovate and compete in the development and distribution of server, desktop, and mobile operating systems, middleware, and virtualization products. Although the department will allow the transaction to proceed, it will continue investigating the distribution of the Novell patents to the CPTN owners. . . . In light of the department's competition concerns, CPTN and its owners made revisions to their formation agreements to acquire approximately 882 patents and patent applications from Novell. The department said that these changes were necessary to protect competition and innovation in the open source software community.").

merged firm. As a result, it obtained a consent decree that required OMAX to grant royalty-free licenses to the relevant patents.[836]

CASENOTE: United States v. Bayer AG and Agricultural Patents

Competitive Impact Statement, Case No. 1:18-cv-01241 (D.D.C. May 29, 2018)

Markets for agricultural products, like those for pharmaceuticals, are often shaped by patent rights, and this means that patents may play a prominent role in both effects theories and in remedy packages. In the blockbuster Bayer / Monsanto transaction, for example, among other things, in framing a consent decree to resolve its competitive concerns, DOJ insisted on the divestiture by the merged firm of a package of intellectual property rights that played an important role in competition to supply "seed treatments": that is, coatings that protect seeds from various hazards.

DOJ's competitive impact statement, published to explain the competitive analysis that led to the proposed remedy, explained the basic concern that the parties would acquire market power in seed treatments without a meaningful threat of entry. "Developing a new, effective seed treatment is a slow, costly, and difficult process, and new seed treatments require extensive regulatory approvals before farmers can use them. Generic versions of the Bayer seed treatments . . . will not be available for at least the next several years due to various intellectual property protections. Neither expansion by existing seed treatments nor new seed treatments expected to launch in the next several years would prevent the anticompetitive effects of the proposed merger."

As a result, Bayer would have to give up its intellectual property. Specifically, the remedy required Bayer to "divest all intellectual property associated with its Poncho, VOTiVO, and TWO.0 seed treatment brands. . . . Because VOTiVO and TWO.0 are each typically sold in combination with Poncho, divestiture of the intellectual property associated with all three products will allow BASF to offer American farmers the same packages of Poncho-branded seed treatments as Bayer does today." It also required that Bayer "divest all intellectual property associated with its ILeVO and COPe0 seed treatments, which are both based on the same active ingredient, fluopyram." In addition, reflecting the need to ensure that the remedy was genuinely effective, "Bayer also will transfer all intellectual property used by these divested seed treatment businesses, including all patents, licenses, know-how, trade names, and data or information collected on the products." In all, Bayer would provide the divestiture buyer (BASF) with "a perpetual, royalty-free license for all patents related to the use of fluopyram in seed treatments."

Although most of our discussion so far has focused on patents, in some cases other forms of IP may play a role in a merger case or a divestiture package. In Intuit / Credit Karma, for example, DOJ's divestiture required not just the divestiture of Credit Karma's digital do-it-yourself ("DDIY") tax preparation business, but also a "limited, non-exclusive license to use the Credit Karma trademarks for the Credit Karma Tax business during the [upcoming, *i.e.*, 2021] tax filing season."[837] This might seem odd: after all, the purpose of a trademark is normally to identify of the product or service provider. Why do you think DOJ required the merged firm to let the divestiture buyer—which of course was *not* Credit Karma—use Credit Karma's trademark?

NOTES

1) What kind of issues do you think the FTC's market-by-market approach to merger control might be missing? What could the FTC do differently? What about Congress?
2) Given the importance of effective drugs to American society, do you think strong patent protection is more desirable or less desirable in pharmaceutical markets than in other areas of the economy?

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[836] See Analysis of Agreement Containing Consent Order, *In the Matter of Flow International Corp.*, FTC File No. 081-0079 (July 10, 2008), 3.

[837] Competitive Impact Statement, United States v. Intuit Inc., Case No. 1:20-cv-3441 (D.D.C. filed Dec. 10, 2020) ("[T]he Divestiture Assets include a limited, non-exclusive license to use the Credit Karma trademarks for the Credit Karma Tax business during the 2021 tax filing season.").

3) Are you surprised by the evidence that additional generic manufacturer entry after the first has significant price effects: for example, that prices are higher in a market with three generic suppliers than in a market with five or six? Do you think we would see similar results in other areas of the economy, or is generic pharmaceutical competition special in some respect? What do you think keeps prices higher when there are one, two, or three generics in the market?
4) Do any aspects of Hatch-Waxman's framework for generic drugs seem undesirable? What other ways could you imagine to incentivize generic entry and flush out weak patents, while still encouraging innovation and investment?

2. Refusal to License

Nowhere do antitrust and IP collide more directly than in an antitrust challenge to a unilateral refusal to license. In the paradigm case, a company with monopoly power is asked for a license by a business that is also a competitor in some market to which the license is an important input; the monopolist refuses to grant the license; and it is sued for monopolization under Section 2 as a result. Most courts considering this issue have held that a simple unilateral refusal to license a patent, without additional conduct, cannot be the basis for antitrust liability.[838]

Patent law itself does not generally impose an obligation to license. In fact, the Patent Act expressly states that "No patent owner otherwise entitled to relief for infringement or contributory infringement of a patent shall be denied relief or deemed guilty of misuse or illegal extension of the patent right by reason of his having . . . refused to license or use any rights to the patent."[839] In an early patent case not involving antitrust claims, *Continental Paper Bag Co. v. Eastern Paper Bag Co.*,[840] the Court noted that a firm holding patents on an improved machine was under no obligation to license the patents to rivals: "As to the suggestion that competitors were excluded from the use of the new patent, we answer that such exclusion may be said to have been of the very essence of the right conferred by the patent, as it is the privilege of any owner of property to use or not use it, without question of motive."[841]

In the years since *Continental Paper Bag*, courts and commentators have pondered whether a refusal to license intellectual property should be subject to equal, lesser, or greater antitrust scrutiny than other refusals to deal. Some commentators have suggested that, because the refusal does nothing more than implement the right to exclude others from the subject matter of the patent grant, antitrust liability for a "pure" refusal to license is incompatible with the patent grant itself.[842] The IP Licensing Guidelines wink at the same point—without quite saying it—when they say that "[t]he antitrust laws generally do not impose liability upon a firm for a unilateral refusal to assist its competitors, in part because doing so may undermine incentives for investment and innovation."[843]

This view animated the Federal Circuit's holding in the *Xerox* case, in which the court considered whether refusal to grant licenses covering patented equipment parts and/or copyrighted manuals could give rise to antitrust liability.

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[838] A concerted agreement among competitors not to license IP is treated like any other boycott. *See*, *e.g.*, Primetime 24 Joint Venture v. Nat'l Broad. Co., Inc., 219 F.3d 92, 102–03 (2d Cir. 2000).

[839] 35 U.S.C. § 271(d)(4).

[840] 210 U.S. 405 (1908).

[841] *Id.* at 429.

[842] *See*, *e.g.*, Herbert J. Hovenkamp, Mark D. Janis, & Mark A. Lemley, *Unilateral Refusals to License in the U.S.*, in Francois Lévêque & Howard Shelanski (eds.), ANTITRUST, PATENTS, AND COPYRIGHT: EU AND US PERSPECTIVES (2005) 15 ("[A]s a general rule there is no antitrust obligation either to use or license a patent."); Jonathan Gleklen, *Per Se Legality for Unilateral Refusals to License IP Is Correct as a Matter of Law and Policy*, Antitrust Source (July 2002); Jeffrey K. MacKie-Mason, *Antitrust Immunity for Refusals to Deal in (Intellectual) Property Is a Slippery Slope*, Antitrust Source (July 2002).

[843] U.S. Dept. of Justice & FTC, ANTITRUST GUIDELINES FOR THE LICENSING OF INTELLECTUAL PROPERTY (2017), 3.

CSU, L.L.C. v. Xerox Corporation

(In re Independent Service Organizations Antitrust Litigation)

203 F.3d 1322 (Fed. Cir. 2000)

Chief Judge Mayer.

[1] CSU, L.L.C. appeals the judgment of the United States District Court for the District of Kansas, dismissing on summary judgment CSU's claims that Xerox's refusal to sell patented parts and copyrighted manuals and to license copyrighted software violate the antitrust laws. Because we agree with the district court that CSU has not raised a genuine issue as to any material fact and that Xerox is entitled to judgment as a matter of law, we affirm.

[2] Xerox manufactures, sells, and services high-volume copiers. Beginning in 1984, it established a policy of not selling parts unique to its series 10 copiers to independent service organizations ("ISOs"), including CSU, unless they were also end-users of the copiers. In 1987, the policy was expanded to include all new products as well as existing series 9 copiers. Enforcement of this policy was tightened in 1989, and Xerox cut off CSU's direct purchase of restricted parts. Xerox also implemented an "on-site end-user verification" procedure to confirm that the parts ordered by certain ISOs or their customers were actually for their end-user use. Initially this procedure applied to only the six most successful ISOs, which included CSU.

[3] To maintain its existing business of servicing Xerox equipment, CSU used parts cannibalized from used Xerox equipment, parts obtained from other ISOs, and parts purchased through a limited number of its customers. For approximately one year, CSU also obtained parts from Rank Xerox, a majority-owned European affiliate of Xerox, until Xerox forced Rank Xerox to stop selling parts to CSU and other ISOs. In 1994, Xerox settled an antitrust lawsuit with a class of ISOs by which it agreed to suspend its restrictive parts policy for six and one-half years and to license its diagnostic software for four and one-half years. CSU opted out of that settlement and filed this suit alleging that Xerox violated the Sherman Act by setting the prices on its patented parts much higher for ISOs than for end-users to force ISOs to raise their prices. This would eliminate ISOs in general and CSU in particular as competitors in the relevant service markets for high speed copiers and printers.

[4] Xerox counterclaimed for patent and copyright infringement and contested CSU's antitrust claims as relying on injury solely caused by Xerox's lawful refusal to sell or license patented parts and copyrighted software. Xerox also claimed that CSU could not assert a patent or copyright misuse defense to Xerox's infringement counterclaims based on Xerox's refusal to deal. The district court granted summary judgment to Xerox dismissing CSU's antitrust claims and holding that if a patent or copyright is lawfully acquired, the patent or copyright holder's unilateral refusal to sell or license its patented invention or copyrighted expression is not unlawful exclusionary conduct under the antitrust laws, even if the refusal to deal impacts competition in more than one market. The court also held, in both the patent and copyright contexts, that the right holder's intent in refusing to deal and any other alleged exclusionary acts committed by the right holder are irrelevant to antitrust law. This appeal followed. [. . .]

[5] Intellectual property rights do not confer a privilege to violate the antitrust laws. But it is also correct that the antitrust laws do not negate the patentee's right to exclude others from patent property. The commercial advantage gained by new technology and its statutory protection by patent do not convert the possessor thereof into a prohibited monopolist. The patent right must be coupled with violations of § 2, and the elements of [a] violation of 15 U.S.C. § 2 must be met. Determination of whether the patentee meets the Sherman Act elements of monopolization or attempt to monopolize is governed by the rules of application of the antitrust laws to market participants, with due consideration to the exclusivity that inheres in the patent grant.

[6] A patent alone does not demonstrate market power. The United States Department of Justice and Federal Trade Commission have issued guidance that, even where it exists, such market power does not impose on the intellectual property owner an obligation to license the use of that property to others. There is no reported case in which a court has imposed antitrust liability for a unilateral refusal to sell or license a patent. The patentee's

right to exclude is further supported by section 271(d) of the Patent Act which states, in pertinent part, that "[n]o patent owner otherwise entitled to relief . . . shall be denied relief or deemed guilty of misuse or illegal extension of the patent right by reason of his having . . . (4) refused to license or use any rights to the patent[.]"

[7] The patentee's right to exclude, however, is not without limit. . . . [A] patent owner who brings suit to enforce the statutory right to exclude others from making, using, or selling the claimed invention is exempt from the antitrust laws, even though such a suit may have an anticompetitive effect, unless the infringement defendant proves one of two conditions. First, he may prove that the asserted patent was obtained through knowing and willful fraud within the meaning of *Walker Process Equipment, Inc. v. Food Machinery & Chemical Corp.,* 382 U.S. 172, 177 (1965). Or he may demonstrate that the infringement suit was a mere sham to cover what is actually no more than an attempt to interfere directly with the business relationships of a competitor. *See id.* (citing *Eastern R.R. Presidents Conference v. Noerr Motor Freight, Inc.,* 365 U.S. 127, 144 (1961)). Here, CSU makes no claim that Xerox obtained its patents through fraud in the Patent and Trademark Office; the *Walker Process* analysis is not implicated.

[8] Irrespective of the patent applicant's conduct before the Patent and Trademark Office, an antitrust claim can also be based on an allegation that a suit is baseless; in order to prove that a suit was within *Noerr*'s "sham" exception to immunity, an antitrust plaintiff must prove that the suit was both *objectively* baseless and *subjectively* motivated by a desire to impose collateral, anti-competitive injury rather than to obtain a justifiable legal remedy. Accordingly, if a suit is not objectively baseless, an antitrust defendant's subjective motivation is immaterial. CSU has alleged that Xerox misused its patents but has not claimed that Xerox's patent infringement counterclaims were shams.

[9] To support its argument that Xerox illegally sought to leverage its presumably legitimate dominance in the equipment and parts market into dominance in the service market, CSU relies on a footnote in *Eastman Kodak Co. v. Image Technical Services, Inc.,* 504 U.S. 451, 480 n. 29 (1992), that "the Court has held many times that power gained through some natural and legal advantage such as a patent, can give rise to liability if a seller exploits his dominant position in one market to expand his empire into the next." Notably, *Kodak* was a tying case when it came before the Supreme Court, and no patents had been asserted in defense of the antitrust claims against Kodak. Conversely, there are no claims in this case of illegally tying the sale of Xerox's patented parts to unpatented products. Therefore, the issue was not resolved by the *Kodak* language cited by CSU. Properly viewed within the framework of a tying case, the footnote can be interpreted as restating the undisputed premise that the patent holder cannot use his statutory right to refuse to sell patented parts to gain a monopoly in a market *beyond the scope of the patent.*

[10] The cited language from *Kodak* does nothing to limit the right of the patentee to refuse to sell or license in markets within the scope of the statutory patent grant. In fact, we have expressly held that, absent exceptional circumstances, a patent may confer the right to exclude competition altogether in more than one antitrust market.

[11] CSU further relies on the Ninth Circuit's holding on remand in *Image Technical Services* that "while exclusionary conduct can include a monopolist's unilateral refusal to license a [patent] or to sell its patented work, a monopolist's desire to exclude others from its protected work is a presumptively valid business justification for any immediate harm to consumers." [*Image Technical Servs. v. Eastman Kodak Co.,* 125 F.3d 1195, 1216 (9th Cir. 1997).] By that case, the Ninth Circuit adopted a rebuttable presumption that the exercise of the statutory right to exclude provides a valid business justification for consumer harm, but then excused as harmless the district court's error in failing to give any instruction on the effect of intellectual property rights on the application of the antitrust laws. It concluded that the jury must have rejected the presumptively valid business justification as pretextual. This logic requires an evaluation of the patentee's subjective motivation for refusing to sell or license its patented products for pretext. We decline to follow *Image Technical Services.*

[12] We have held that if a patent infringement suit is not objectively baseless, an antitrust defendant's subjective motivation is immaterial. We see no more reason to inquire into the subjective motivation of Xerox in refusing to sell or license its patented works than we found in evaluating the subjective motivation of a patentee in bringing suit to enforce that same right. In the absence of any indication of illegal tying, fraud in the Patent and

Trademark Office, or sham litigation, the patent holder may enforce the statutory right to exclude others from making, using, or selling the claimed invention free from liability under the antitrust laws. We therefore will not inquire into his subjective motivation for exerting his statutory rights, even though his refusal to sell or license his patented invention may have an anticompetitive effect, so long as that anticompetitive effect is not illegally extended beyond the statutory patent grant. It is the infringement defendant and not the patentee that bears the burden to show that one of these exceptional situations exists and, in the absence of such proof, we will not inquire into the patentee's motivations for asserting his statutory right to exclude. Even in cases where the infringement defendant has met this burden, which CSU has not, he must then also prove the elements of the Sherman Act violation.

[13] We answer the threshold question of whether Xerox's refusal to sell its patented parts exceeds the scope of the patent grant in the negative. Therefore, our inquiry is at an end. Xerox was under no obligation to sell or license its patented parts and did not violate the antitrust laws by refusing to do so.

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[14] The Copyright Act expressly grants a copyright owner the exclusive right to distribute the protected work by transfer of ownership, or by rental, lease, or lending. The owner of the copyright, if it pleases, may refrain from vending or licensing and content itself with simply exercising the right to exclude others from using its property.

[15] The Supreme Court has made clear that the property right granted by copyright law cannot be used with impunity to extend power in the marketplace beyond what Congress intended. The Court has not, however, directly addressed the antitrust implications of a unilateral refusal to sell or license copyrighted expression. [. . .]

[16] Perhaps the most extensive analysis of the effect of a unilateral refusal to license copyrighted expression was conducted by the First Circuit in [*Data General Corp. v. Grumman Sys. Support Corp.*, 36 F.3d 1147 (1st Cir. 1994)]. There, the court noted that the limited copyright monopoly is based on Congress' empirical assumption that the right to "exclude others from using their works creates a system of incentives that promotes consumer welfare in the long term by encouraging investment in the creation of desirable artistic and functional works of expression. We cannot require antitrust defendants to prove and reprove the merits of this legislative assumption in every case where a refusal to license a copyrighted work comes under attack." The court went on to establish as a legal standard that while exclusionary conduct can include a monopolist's unilateral refusal to license a copyright, an author's desire to exclude others from use of its copyrighted work is a presumptively valid business justification for any immediate harm to consumers. The burden to overcome this presumption was firmly placed on the antitrust plaintiff. The court gave no weight to evidence showing knowledge that developing a proprietary position would help to maintain a monopoly in the service market in the face of contrary evidence of the defendant's desire to develop state-of-the-art diagnostic software to enhance its service and consumer benefit.

[17] As discussed above, the Ninth Circuit adopted a modified version of this *Data General* standard. Both courts agreed that the presumption could be rebutted by evidence that the monopolist acquired the protection of the intellectual property laws in an unlawful manner. The Ninth Circuit, however, extended the possible means of rebutting the presumption to include evidence that the defense and exploitation of the copyright grant was merely a pretextual business justification to mask anticompetitive conduct. The hazards of this approach are evident in both the path taken and the outcome reached. The jury in that case was instructed to examine each proffered business justification for pretext, and no weight was given to the intellectual property rights in the instructions. This permitted the jury to second guess the subjective motivation of the copyright holder in asserting its statutory rights to exclude under the copyright laws without properly weighing the presumption of legitimacy in asserting its rights under the copyright laws. While concluding that the failure to weigh the intellectual property rights was an abuse of discretion, the Ninth Circuit nevertheless held the error harmless because it thought the jury must have rejected the presumptive validity of asserting the copyrights as pretextual. This is in reality a significant departure from the First Circuit's central premise that rebutting the presumption would be an uphill battle and would only be appropriate in those rare cases in which imposing antitrust liability is unlikely to frustrate the objectives of the Copyright Act.

[18] We believe the First Circuit's approach is more consistent with both the antitrust and the copyright laws and is the standard that would most likely be followed by the Tenth Circuit in considering the effect of Xerox's unilateral right to refuse to license or sell copyrighted manuals and diagnostic software on liability under the antitrust laws. We therefore reject CSU's invitation to examine Xerox's subjective motivation in asserting its right to exclude under the copyright laws for pretext, in the absence of any evidence that the copyrights were obtained by unlawful means or were used to gain monopoly power beyond the statutory copyright granted by Congress. In the absence of such definitive rebuttal evidence, Xerox's refusal to sell or license its copyrighted works was squarely within the rights granted by Congress to the copyright holder and did not constitute a violation of the antitrust laws.

[19] Accordingly, the judgment of the United States District Court for the District of Kansas is affirmed.

CASENOTE: Image Tech. Servs., Inc. v. Eastman Kodak Co.

125 F.3d 1195 (9th Cir. 1997)

The *Xerox* court's rhetorical and substantive foil was the Ninth Circuit's decision in *Kodak*—which was itself a step beyond the First Circuit's *Data General*. *Kodak* dealt with the conduct of Eastman Kodak, which manufactured and sold photocopiers, while also selling replacement parts (and installation services for those parts) for its own copiers. In an effort to fend off competition from third-party suppliers of parts and services (independent service organizations or "ISOs"), Kodak stopped selling parts to those suppliers, and obtained commitments from its own contracted part manufacturers that they would also refuse to sell to the ISOs. The ISOs sued, alleging that Kodak was unlawfully tying parts to copiers in violation of Section 1 and was monopolizing the sale of parts under Section 2. A jury found Kodak liable.

The Ninth Circuit described the border between antitrust and IP as a "field of dissonance," and indicated that "[h]armonizing antitrust monopoly theory with the monopolies granted by intellectual property law requires that some weight be given to the intellectual property rights of the monopolist." The court appeared to assume that, under *Aspen Skiing* (note that *Trinko* had not yet been decided!), refusal to deal by a monopolist would result in liability under Section 2 if, but only if, the monopolist lacked a "legitimate business justification." And such a justification would be *presumed* in a case where the refusal corresponded to intellectual property rights: "exclusionary conduct can include a monopolist's unilateral refusal to license a patent or copyright, or to sell its patented or copyrighted work, a monopolist's desire to exclude others from its protected work is a *presumptively valid business justification* for any immediate harm to consumers." (Emphasis added.)

However, this presumption was rebuttable, including by evidence of "pretext." This could be established by "evidence suggest[ing] that the proffered business justification played no part in the decision to act." And, the court held, the record in this case suggested that the jury would have concluded that Kodak's justification was pretextual: "Kodak's parts manager testified that patents did not cross his mind at the time Kodak began the parts policy. Further, no distinction was made by Kodak between proprietary parts covered by tooling or engineering clauses and patented or copyrighted products. In denying Kodak's motion for a new trial, the district court commented that Kodak was not actually motivated by protecting its intellectual property rights. . . . [T]his case concerns a blanket refusal that included protected and unprotected products." As a result, IP was no defense.

NOTES

1) You have now seen the approach of the Federal Circuit in *Xerox* (which effectively immunizes pure refusals to license) and that of the Ninth in *Kodak* (which requires, but presumes, a business justification). Which is the better rule? If a "desire to exclude" is indeed a legitimate justification for the purposes of the Ninth Circuit's text, what should or could "pretextual" mean for this purpose?

2) Is it true, as a matter of patent law, that a patent creates a right to exclude which is "complete"? Can this idea be squared with the principle that patent law seeks to tie monetary damages to a reasonable royalty?[844] This award may be trebled for willful infringement,[845] but the Supreme Court has made clear that enhanced damages in patent "should generally be reserved for egregious cases typified by willful misconduct."[846] Similarly, awards of attorneys' fees in patent cases are limited to "exceptional cases."[847] U.S. patent law also provides for preliminary and permanent injunctions,[848] but since the Supreme Court's opinion in *eBay Inc. v. MercExchange, LLC*,[849] it has been clear that injunctions are not available as a matter of course, but rather the need for relief beyond monetary compensation must be established by the plaintiff according to traditional rules of equity. What, if anything, follows from all this for antitrust policy?

3) Both *Kodak* and *Xerox* involved copier firms cutting off independent copier repair firms from access to a range of copier parts. Why would firms like Xerox and Kodak want to cut off ISOs' access to replacement parts in the first place? Couldn't the patent holders garner whatever rents their patents might earn them by charging the ISOs higher prices for the patented parts? Why would the firms choose to limit competition in repair rather than just raising the price of parts? Chris Sprigman has raised two possible reasons for such a practice:

> [T]he cut-off may afford the copier firm additional rents via enhanced ability to price discriminate. Additionally, the cut-off may allow the copier firm to increase the length of time during which it will be able to extract rents.
>
> How might this be so? Prior to the cut-off, the ISOs are able to work with the copier firm's parts. Through their experience with the various parts, the ISOs may learn how to invent around the copier firm's patents and create functionally useful replacements that do not trespass upon the copier firm's IP. Similarly with parts covered by trade secret; via repeated use and interaction, the ISOs may unravel the secrets of a part's function or manufacture, thereby vitiating entirely the narrow trade secret protection. And once an ISO is able to provide a workable replacement (or, perhaps more often, a workable repair) for the copier firm's proprietary part, either through a patent work-around or by piercing a trade secret, competition from the ISOs will dispel some of the rents that the copier firm currently enjoys.
>
> After the cut-off, of course, the ISOs are deprived of much of their former opportunity to work with and learn from the copier firm's proprietary parts. So the motivation for the cut-off may be explained not only by the ability to extract rents in the short run, but additionally by the length of time during which rents may be extracted.
>
> Should a firm's refusal to deal aimed at extending the period during which it is able to extract rents from its patent be shielded from antitrust liability? That is a much more difficult question than the one typically posited in cases like *Kodak* and *Xerox*.[850]

4) A small number of cases have considered the application of the "essential facilities" doctrine to IP licensing, and one or two have indicated a little receptivity to the idea in principle.[851] Are there any circumstances under

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[844] *See* 35 U.S.C. § 284 ("Upon finding for the claimant the court shall award the claimant damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer, together with interest and costs as fixed by the court").

[845] *Id.*

[846] Halo Elecs., Inc. v. Pulse Elecs., Inc., 579 U.S. 93, 106 (2016).

[847] 35 U.S.C. § 285.

[848] 25 U.S.C. § 283.

[849] 547 U.S. 388 (2006).

[850] Christopher Jon Sprigman, *The Intersection of Patent and Antitrust Law*, in Einer Elhauge (ed.), RESEARCH HANDBOOK ON THE ECONOMICS OF ANTITRUST (2012) 351.

[851] *See*, *e.g.*, Bellsouth Advertising & Pub. Corp. v. Donnelley Information Pub., Inc., 719 F. Supp. 1551, 1566–67 (S.D. Fla. 1988) ("Although the doctrine of essential facilities has been applied predominantly to tangible assets, there is no reason why it could not apply, as in this case, to information wrongfully withheld. The effect in both situations is the same: a party is prevented from sharing in something essential to compete. . . . Donnelley is not precluded from attempting to prove intent by using the essential facilities doctrine in conjunction with other evidence that the Bell companies willfully maintained a monopoly."), *rev'd on other grounds*, 999 F.2d 1436 (11th Cir. 1993).

which you think an IP right could be considered an essential facility that must be shared on reasonable terms with all who want a license? What if anything should be done if the owner of a patent that was needed to commercialize a COVID (or other pandemic) vaccine refused to license that patent to other vaccine-makers?

5) How would you analyze a refusal to license that was not absolute but which was, rather, aimed only at actual or potential competitors of the licensor? In other words, the licensing policy would be: "you can have a license at price X unless you are a competitor, in which case you may not have a license at all." Under what circumstances, if any, would that state an antitrust violation, and what would the remedy be? What if the licensor charged rivals a higher royalty, rather than just refusing to license them?

3. Unilateral "Abuse" of the Patent System: Thicketing, Trolling, and Hopping

In Chapter VII we saw that obtaining a patent by fraud can constitute unlawful monopolization: a so-called "*Walker Process*" claim.[852] In this section we will meet other unilateral conduct that may be challenged as an antitrust violation: namely, patent "thicketing"; patent "trolling"; and "product hopping."

(a) Patent Thicketing

Patent "thicketing" is an unflattering label for the practice of amassing a patent portfolio—usually alleged to be of dubious or low quality—in a manner that may harm competition. In the following extracts, the Department of Justice warns the Seventh Circuit against giving this theory any oxygen, and the Seventh Circuit agrees. Do you?

Brief for the United States of America as Amicus Curiae in Support of Appellees, UFCW Local 1500 Welfare Fund v. AbbVie Inc.

Case No. 20-2402 (7th Cir. filed Dec. 28, 2020)

[1] Plaintiffs-appellants allege that defendant-appellee AbbVie Inc. has maintained its monopoly in the market for the drug Humira by, among other conduct, filing hundreds of patent applications and thereby amassing a "patent thicket." Through this aspect of their theory, plaintiffs effectively would attach antitrust liability to the procurement of a large portfolio of patents, a result contrary to antitrust law and patent law.[1] Accordingly, in the interest of competition and innovation, the Court should exclude AbbVie's patent procurement from the alleged anticompetitive conduct when assessing the adequacy of plaintiffs' claim under Section 2 of the Sherman Act. [. . .]

[2] In their complaint, plaintiffs allege that AbbVie's development, acquisition, and enforcement of its patent thicket undertaken and executed without regard to the merits of the patents violates Section 2 of the Sherman Act. AbbVie obtained an "enormous portfolio of patents," by one estimate filing 247 patent applications and procuring 132 Humira-related patents. AbbVie "sought to obtain patents regardless of their merits," and, as a result, "many of its patents do not withstand scrutiny."

[3] AbbVie nonetheless threatened protracted litigation against any applicants for a Humira biosimilar. "Regardless of the ultimate merits" of AbbVie's patents, "the sheer volume of patents and claims" deterred or delayed entry of biosimilar competitors. "Few if any companies could litigate all of AbbVie's patents; indeed, few could even parse through the morass of patents to determine whether any were valid and infringed." [. . .]

[4] Plaintiffs seek an unwarranted extension of Section 2 liability, endeavoring to base liability, in part, on mere patent procurement. Filing patent applications, even hundreds, can promote innovation and competition, the

[852] Walker Process Equipment, Inc. v. Food Machinery & Chemical Corp., 382 U.S. 172, 177 (1965).

[1] This brief addresses the internal development of patents, not the acquisition of patents from third parties. In a number of circumstances, an acquisition of a patent(s) from a third party can give rise to antitrust concerns.

shared goals of patent and antitrust law. Accordingly to avoid chilling such procompetitive conduct, courts recognize Section 2 liability for conduct involving patent procurement only in limited circumstances.

[5] Plaintiffs have not alleged such circumstances and have not presented a cognizable theory of liability related to AbbVie's patent procurement. They have not alleged any use of the application process—as opposed to the outcome of process—to exclude competitors, and therefore have failed to allege sham petitioning with respect to AbbVie's patent procurement. Indeed, the process costs of applying for patents fall entirely on AbbVie. Once the Patent and Trademark Office (USPTO) grants a patent, the patentee, of course, can impose costs on a competitor by asserting the patent, as AbbVie did here in patent dances and in litigation. However, imposing assertion costs is improper only in limited circumstances, e.g., sham litigation or the assertion of a patent obtained by fraud (a *Walker Process* claim). The mere fact of asserting numerous validly obtained patents is not enough to give rise to antitrust liability.

[6] Plaintiffs have waived any *Walker Process* claim. In any event, they have not attempted to allege fraud on the USPTO with regard to the vast majority of the patent procurement. Accordingly, and in order not to upset the Supreme Court's suitable accommodation of antitrust law and patent law, and thereby discourage innovation, the Court should not consider AbbVie's patent procurement, or the mere fact of its numerous patents, as part of plaintiffs' Section 2 claim. More broadly, the Court should decline plaintiffs' invitation to use antitrust law to redress alleged deficiencies in the patent system and the regulatory framework. As the district court correctly concluded, that is a job for Congress, not the courts. [. . .]

[7] Ordinarily, there is no limitation on a company's freedom to generate its own patents. Courts therefore have concluded that the mere accumulation of patents, no matter how many, is not in and of itself illegal. The reasons for this rule are straightforward, but critical. Put simply, we do not wish to discourage innovation, even by monopolists. The prospect of a patent drives innovation, a shared goal of antitrust law and patent law. Thus, a vigorous research program directed toward improving one's competitive position via the development of patented inventions will not by itself be grounds for antitrust challenge, even if the program ultimately results in the entity achieving a dominant or monopoly position in the field.

[8] Additionally, imposing liability for the mere accumulation of patents could have unwanted collateral consequences. The patent system is designed to facilitate the disclosure of inventions in exchange for a limited period of exclusivity. This disclosure can facilitate follow-on innovation. Imposing antitrust liability merely for filing large numbers of patent applications may cause innovators to abandon the patent system and instead rely on trade secrets to protect investment in research and development, which could hamper follow-on innovation rather than advance it.

[9] Relatedly, a patentee's conduct in obtaining or enforcing a patent generally is protected by the *Noerr-Pennington* doctrine. Under this doctrine, those who petition government for redress are generally immune from antitrust liability. [. . .]

[10] *Walker Process* sometimes is viewed as the patent-litigation version of a broader "misrepresentation" exception to *Noerr*. The logic of this exception is that, where government action is procured through intentional fraud, the outcome properly is attributed to the private party whose fraud procured the outcome, not the government actor who unwittingly relied on the fraudulent representation.

[11] In and of itself, however, procuring large numbers of patents does not implicate either the sham or Walker-Process exception to *Noerr-Pennington* protection. It therefore follows that, without more, procuring a large portfolio of patents cannot constitute anticompetitive conduct sufficient to ground a Section 2 claim.

Mayor and City Council of Baltimore v. AbbVie Inc.

42 F.4th 709 (7th Cir. 2022)

Judge Easterbrook.

[1] [. . .] [W]hat's wrong with having lots of patents? If AbbVie made 132 inventions, why can't it hold 132 patents? The patent laws do not set a cap on the number of patents any one person can hold—in general, or

pertaining to a single subject. Tech companies such as Cisco, Qualcomm, Intel, Microsoft, and Apple have much larger portfolios of patents. Thomas Edison alone held 1,093 U.S. patents. When the FTC challenged Qualcomm's patent practices, it objected to licensing terms rather than the sheer size of the portfolio—and the FTC lost in the end. [. . .]

[2] The payors insist that AbbVie's patents are weak—too weak to monopolize the sales of such an important drug. This argument leaves us cold. Weak patents are valid; to say they are weak is to say that their scope is limited, not that they are illegitimate. [. . .]

[3] Trying to conjure liability out of successful petitions for governmental aid in blocking competition runs into the *Noerr-Pennington* doctrine. This doctrine, rooted in the First Amendment, deems petitioning a protected activity.

[4] Unsuccessful petitioning can be a source of liability when the petitioner runs up rivals' costs and so stifles competition independent of a petition's success. An example would be filing a frivolous suit, as many a suit is more costly to defend than to prosecute. The Justices held in BE&K Construction Co. v. NLRB, 536 U.S. 516 (2002), that no one has a constitutional right to pursue baseless litigation. *Professional Real Estate* says that petitioning exceeds the scope of the *Noerr-Pennington* doctrine when the petitioner tries to interfere directly with the business relationships of a competitor, through the use of the governmental process—as opposed to the outcome of that process—as an anticompetitive weapon. But the payors express concern about the successful outcome of AbbVie's petitioning, not about costs imposed by the process of petitioning. Patent applications, successful or not, do not impose costs on rivals; only issued patents do so.

[5] Doubtless it is possible to use properly issued patents in a way that *Noerr-Pennington* does not protect. For example, if AbbVie were to assert irrelevant patents against producers of biosimilar drugs, that might come within the scope of *BE&K Construction*. The payors contend that AbbVie listed some irrelevant patents in the litigation it commenced against would-be entrants, but they do not contend that AbbVie listed only irrelevant patents in those suits. What's more, the sifting of wheat from chaff is a job for the judges hearing those patent cases. The would-be entrants . . . were free to make arguments along these lines; a separate antitrust suit by strangers to the patent litigation does not justify an effort to adjudicate by proxy what might have happened in the patent litigation, but didn't.

(b) Patent Trolling

"Patent trolling" is an unflattering label sometimes applied to the business model of a "patent assertion entity" ("PAE"). This business model involves obtaining patents in order to assert them against entities practicing the patents, in order to obtain "holdup" rents, through the threat of an injunction, from those who have already sunk investments into the patented technology. As Fiona Scott Morton and Carl Shapiro describe it:

> The pure PAE business model involves purchasing patents, often in large numbers, and obtaining revenues by asserting those patents, with no conventional lines of business. By definition, pure PAEs have no financial interest in targeted products or substitutes or complements to them. The core competency of PAEs is to acquire and monetize patents. [. . .]
>
> PAEs seek to keep abreast of industry knowledge and trends so that they can locate valuable patents and purchase them inexpensively. Indeed, having good information about potential licensees and past licensing deals or settlement terms is critical to the PAE business model. Some PAEs require their business partners to sign very stringent non-disclosure agreements to keep this information private.
>
> PAEs adopt diverse business strategies to exploit these opportunities. Some PAEs are mass aggregators, purchasing thousands of patents. Aggregating related patents can enhance monetization if litigation by the PAE based on the combined portfolio is profitable while litigation of the smaller constituent portfolios is not. A large portfolio may especially be needed if many of the patents involved are weak. Mass aggregation of related but weak patents may thus allow the PAE to achieve a rather novel type of scale economy. Other PAEs assert a small

> number of patents against many targets. One version of this involves assertions that have elements of nuisance suits, where targets can settle for less than the cost of litigation.[853]

There is room for reasonable disagreement about the right legal and social response to the activity of PAEs. On the one hand, obtaining and monetizing patents is exactly what the Patent Act is supposed to facilitate. It hardly seems fair to punish businesses for rationally exercising the valuable rights that the federal government has itself conferred on them. On the other hand, the extraction of surprise holdup rents by entities that engage in no innovation—from those that do!—does not seem the most sympathetic or socially beneficial use of the intellectual property laws.

Antitrust's toolkit does not contain many devices for deterring the activities of PAEs. In general, antitrust doctrine recognizes that "sham litigation"—that is, the prosecution of objectively baseless lawsuits against rivals—may constitute a means of unlawful monopolization when it operates to exclude a monopolist's rivals and thus to create or maintain market power.[854] But the paradigm PAE does not itself practice the patents: it is not active in the same market as its targets, and thus cannot be liable for monopolizing a market in which it is not present.[855] More complex cases can involve a practice known as "privateering" in which a practicing entity (*i.e.*, a competitor) transfers a patent portfolio to a PAE under circumstances in which the PAE is likely to assert them against its rivals, raising their costs.[856] Mark Popofsky and Michael Laufert have argued that antitrust can reach such transfers when they are structured in ways that raise rivals' costs by: (1) increasing the "ability or incentives to enforce the transferred patents"; (2) disaggregate a patent portfolio in order to expose rivals to "royalty stacking" (*i.e.*, extraction of value in excess of a reasonable royalty through multiple independent holdup threats); or (3) involve violation of a previous commitment to limit royalties to a reasonable rate.[857]

The principal difficulty in an antitrust challenge to "patent trolling" is the broad protection from antitrust liability afforded under the *Noerr-Pennington* doctrine to any use of the court system that is not objectively baseless.[858] In a lengthy analysis of a monopolization challenge to infringement litigation from a significant PAE, the U.S. District Court for the District of Maryland applied the doctrine and concluded that the room for antitrust to operate is limited. The decision was subsequently affirmed by the Federal Circuit on other grounds.[859]

Intellectual Ventures I LLC v. Capital One Financial Corp.

280 F. Supp. 3d 691 (D. Md. 2017)

Judge Grimm.

[1] The essence of Capital One's antitrust claim is that IV is a "patent troll,"[3] and not just any patent troll, but a veritable Dovregubben.[4] Capital One asserts that IV's business practice is to acquire a vast portfolio of thousands of patents that purportedly deal with technology essential to the types of services offered by commercial banks (such as ATM transactions, mobile banking, on-line banking, and credit card transactions). It then employs an aggressive marketing scheme whereby it makes an "offer" for banks to license (Capital One

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853 Fiona M. Scott Morton & Carl Shapiro, *Strategic Patent Acquisitions*, 79 Antitrust L.J. 463, 464, 470 (2014).

854 *See* Chapters VII, IX.

855 *See*, *e.g.*, Spanish Broad. Sys. of Fla., Inc. v. Clear Channel Commc'ns, Inc., 376 F.3d 1065, 1075 (11th Cir. 2004).

856 *See*, *e.g.*, Jay P. Kesan, Anne Layne-Farrar & David L. Schwartz, *Understanding Patent "Privateering": A Quantitative Assessment*, 16 J. Empirical Leg. Stud. 343 (2019); Jorge Lemus & Emil Temnyalov, *Patent privateering, litigation, and R&D incentives*, 48 RAND J. Econ. 1004 (2017); Matthew Sipe, *Patent Privateers and Antitrust Fears*, 22 Mich. Telecomm. & Tech. L. Rev. 191 (2016); Mark S. Popofsky & Michael D. Laufert, *Antitrust Attacks On Patent Assertion Entities*, 79 Antitrust L.J. 445, 455 (2014).

857 Mark S. Popofsky & Michael D. Laufert, *Antitrust Attacks On Patent Assertion Entities*, 79 Antitrust L.J. 445, 456–57 (2014); *see also* Michael A. Carrier, *Patent Assertion Entities: Six Actions the Antitrust Agencies Can Take*, Comp. Pol'y Int'l (Jan. 2013).

858 *See supra* Chapter IX.

859 Intell. Ventures I LLC v. Cap. One Fin. Corp., 937 F.3d 1359 (Fed. Cir. 2019).

3 A "patent troll" is an individual or company who acquires by purchase or application to the Patent and Trademark Office a patent that he uses not to protect an invention but to obtain a license fee from, or legal judgment against, an alleged infringer. Patent trolls are also known as patent assertion entities (PAEs), and non-practicing entities (NPEs).

4 Dovregubben was the Troll King in Henrik Ibsen's 1867 play *Peer Gynt*.

really would prefer to say "extorts" banks to license) its entire portfolio for a period of years at a jaw-droppingly high price. But, Capital One insists, when the banks ask for details about the patents covered in the portfolio in order to determine whether their services infringe them, IV refuses to disclose sufficient information to enable them to make an intelligent decision about whether they should agree to the license. And, if the bank balks at licensing the entire portfolio at IV's take-it-or-leave-it price, IV then threatens to file a patent infringement claim against the bank regarding only a few of the patents in the portfolio. Adding insult to injury, IV then makes it clear that should it lose the patent infringement case, it will simply file another (and if needed, another, and so on) regarding a different set of its patents, until the prospect of endless high-cost litigation forces the bank to capitulate and license the entire portfolio.

[2] Capital One characterizes IV's business model as comprised of three components:

> *accumulate* a vast portfolio of patents purportedly relating to essential commercial banking services, *conceal* the details of those patents so that the banks cannot determine whether their products infringe any of IV's patents, and serially *litigate* to force the banks to capitulate and license the portfolio at exorbitant cost. This conduct, Capital One insists, constitutes monopolization under § 2 of the Sherman Act, attempted monopolization under § 2 of the Sherman Act, and unlawful asset acquisition under § 7 of the Clayton Act.

[3] Nonsense, IV indignantly responds. It counters Capital One's charges by arguing that it legitimately purchased or otherwise acquired its large portfolio of patents that relate to multiple technology markets. It then offers to license its portfolio to banks (and other types of businesses), beginning its negotiation with an opening offer, and expecting the bank to counteroffer, thereby initiating a back-and-forth exchange that it hopes will result in a mutually-agreeable licensing fee. IV vehemently denies that it conceals the details of its individual patents or that Capital One could not determine what they relate to by reviewing publicly available information. As IV sees things, when Capital One declined to make a counter offer to its opening bid, it then selected a number of its patents and brought suit against Capital One, first in the Eastern District of Virginia, and then, when that suit was unsuccessful, in this Court, with respect to a different set of patents. Moreover, IV claims that Capital One is, in essence, an "efficient infringer"—an entity that engages in its business without care for whether it infringes on patents held by others, with the knowledge that a patent infringement case is expensive to bring, and many patent holders lack the funds to do so to protect their rights. As such, Capital One can play the odds, infringing patents with near impunity until the rare patent holder with the resources to sue does so, and then negotiate a favorable license fee.

[4] IV points out that each of its patents is presumptively valid, and that it has an absolute right to file litigation to enforce them. And, in IV's view, if enforcing its patents through litigation has any monopoly effect (which IV denies it does), it has immunity under the *Noerr–Pennington* doctrine. . . .

[5] IV also asserts that Capital One's antitrust theory is fundamentally flawed, because no liability can attach unless Capital One can prove that IV exercises monopoly power within a relevant market. Monopoly power is the power to control prices or exclude competition. IV insists that it does neither, because the correct market definition would recognize that what IV owns is a series of patents that relate to multiple, distinct technology markets. And IV could exercise monopoly power only if Capital One can show that its patents include those affecting alternative substitute technologies that Capital One otherwise could turn to in order to avoid having to license IV's patents. Capital One has not made this showing, IV contends, entitling it to summary judgment.

[6] Underlying the legal issues in this case are two important but competing policies. On one hand, we value innovation that leads to new inventions that advance science and technology, protecting that creative effort by issuing patents. A patent, by its very nature, vests its owner with a type of legal monopoly, which it can enforce against anyone who infringes the patent. Enforcing a patent through litigation protects this monopoly, even though in other circumstances we view monopolies as harmful.

[7] The other important policy implicated by this case, of course, is the strong desire to ensure vigorous competition in the marketplace, so that consumers (whether businesses or individuals) can purchase at the lowest possible price. To promote the benefits of robust competition, antitrust law aims to prevent a company from having the ability to control the price of its product or exclude competitors to the extent that it can charge

sustained supracompetitive prices (prices substantially above what a competitive price would be if consumers could simply buy a close substitute product from a competitor at lower cost).

[8] The exercise of monopoly power with regard to a single patent (or even a few patents) usually does not offend antitrust law. But it is another matter to acquire a vast portfolio of patents that are essential to technology employed by an entire industry and then to compel its licensing at take-it-or-leave-it prices because it is not economically feasible to determine if alternative technologies, not covered by the accumulation of patents, are available. This acquisition and compelled licensing could amount to the ability to exercise monopoly power on an entirely different scale. [. . .]

[9] . . . Antitrust law is designed to prevent the acquisition and exercise of monopoly power.

[10] Each of the above important competing policies is at play in this case. Capital One argues, through its highly credentialed and impressive economic expert, Professor Fiona Scott Morton of Yale University, that IV possesses monopoly power in connection with its large financial services patent portfolio, which touches on essential technologies that commercial banks have heavily invested in and cannot realistically design around to avoid the reach of IV's patents. Because of the size of this portfolio (between 7,725 and 35,000 patents, depending on whether Capital One or IV's expert is correct), IV is able to charge supracompetitive prices to license the portfolio. And IV's concealment of the details regarding the patents leaves Capital One unable (without incurring ruinous cost) to ferret out the particulars of each patent and assess whether it infringes any patents. Also at play is IV's aggressive policy of threatening (and bringing) expensive serial patent infringement suits. IV's aggregation of such a large portfolio, combined with its concealment and aggressive litigation strategies will, according to Capital One, eventually force it to capitulate and pay IV's supracompetitive price to license the entire portfolio.

[11] As Professor Scott Morton sees it, antitrust analysis commonly used to determine whether a proposed merger will result in anticompetitive effects, simply does not work for the facts of this case. That is because merger analysis is ex ante, focusing on whether, if the merger is approved, the new entity will be able to charge a small but significant non-transitory increase in price (referred to as "SSNIP") that it could maintain over time without competition from others making that price increase unsustainable. Put differently, SSNIP analysis is best done before the entity of interest has acquired monopoly power. Scott Morton reasons that this case requires ex post analysis because Capital One already had incurred significant costs to acquire the technology to compete with other commercial banks in essential services such as on-line banking, remote banking, and ATM and credit card transactions when IV began licensing its massive financial services patent portfolio. In other words, IV already had acquired monopoly power when it approached Capital One to license its patents. Because Capital One already had incurred substantial sunk costs in the technology in which it had invested, it was unable to design around IV's enormous portfolio to adopt non-infringing technologies the way it could have done if it knew of the breadth and scope of IV's patents before it incurred the cost of the technologies it adopted.

[12] Under her proposed ex post analysis, it is IV's conduct after having acquired monopoly power that is critical to antitrust scrutiny. Through its trio of patent aggregation, concealment and litigation, IV has acquired insurmountable bargaining power enabling it to exercise "hold-up" power by demanding take-it-or-leave-it supracompetitive prices to license its financial services portfolio. And even though it has resisted doing so to date, eventually Capital One will be forced to capitulate to the threat of exorbitantly expensive patent litigation to purchase a license that it does not want, despite the fact that IV's singular lack of success in prosecuting any of its patent suits against IV (or other banks) suggests that its massive portfolio is in truth composed of nothing more than an amalgamation of weak patents. And, but for IV's practice of accumulation, concealment and litigation, it could never command a price to license its portfolio of weak patents at anything near the supracompetitive price it sought from Capital One. [. . .]

[13] Pure humbug, counters IV, through its equally well-credentialed and impressive economic expert, Professor Richard Gilbert from the University of California, Berkley. He challenges Professor Scott Morton's market definition, arguing that the proper definition is not a "cluster" of financial services patents constituting a single product, but rather a collection of patents that relate to multiple distinct technology markets. Professor Gilbert relies on the Antitrust Guidelines for the Licensing of Intellectual Property issued jointly by the U.S. Department

of Justice and the Federal Trade Commission ("Guidelines"). The Guidelines state, relevantly, that "[a]lthough the intellectual property right confers the power to exclude with respect to the specific product, process, or work in question, there will often be sufficient actual or potential close substitutes for such product, process, or work to prevent the exercise of market power." The flaw in Capital One's antitrust analysis, according to Professor Gilbert, is its failure to analyze the distinct technology markets for which IV does have patents to determine whether there are alternative close substitutes that Capital One could turn to in order to avoid having to license from IV. [. . .]

[14] If the only issue raised in IV's summary judgment motion was whether there are genuine disputes of material fact that would entitle it to judgment as a matter of law on the issues of possession of monopoly power in a relevant market and the willful acquisition or maintenance of that power as distinguished from growth or development as a consequence of a superior product, business acumen, or historic accident, I would deny the motion and allow the case to proceed to trial. This is because I have concluded from the record before me that Capital One has identified admissible evidence to establish a genuine dispute as to these issues, precluding summary judgment. But as next will be seen, there are further legal issues which, when resolved, require the granting of IV's motion. [. . .]

[15] Antitrust law proscribes the willful acquisition or maintenance of monopoly power within a market, as well as attempts to monopolize. In contrast, a patent creates a legal monopoly. Additionally, those who petition government for redress are generally immune from antitrust liability under what is known as *Noerr-Pennington* immunity. This holds true for parties who file suit in court. And, patent holders that believe that their patents have been infringed may seek to enforce their rights under the patent through patent litigation. Thus, when a party challenges a patent holder's efforts to enforce its patents through litigation, the court must determine whether the patent holder is exercising the lawful restraint on trade of the patent monopoly or the illegal restraint prohibited broadly by the Sherman Act. To do so, courts must balance the privileges of a patent holder under its patent grants with the prohibitions of the Sherman Act against combinations and attempts to monopolize.

[16] IV contends that under the First Amendment and the *Noerr-Pennington* doctrine, Intellectual Ventures I and Intellectual Ventures II, like other patent owners, are entitled to petition a court for a redress of their grievances, that is, IV may sue corporations like Capital One for patent infringement without being sued under the antitrust laws for bringing suit. On that basis, it argues that, for Capital One to proceed on its antitrust claims against IV based on IV's patent litigation activities, Capital One must establish that an exception to *Noerr-Pennington* exists such that IV was not entitled to exercise its right to sue. According to IV, Capital One has failed to prove that IV's claims were "objectively baseless," as it had to do to prove that IV was not exempt from antitrust liability. IV asserts that Capital One instead tried to prove that IV's claims were "unsuccessful," which IV insists is not enough.

[17] Capital One counters that *Noerr-Pennington* immunity simply does not apply because the litigation conduct is part of a broader monopolistic scheme, and *Noerr* does not insulate the entire scheme. Insofar as Capital One argues that IV's aggregation of patents to create market power would support substantial Section 2 and Section 7 claims on its own, and that the concealment and misdirection at the heart of IV's extortive licensing strategy would be anticompetitive even if IV had never filed a lawsuit, this contention is contrary to Capital One's pleadings. Capital One alleges that IV has eliminated banks' access to substitutes for IV's license, both in the form of other patent licenses and banking-product designs, through a carefully orchestrated campaign of patent aggregation, concealment, and sham litigation, and that IV's use of patent accumulations to cut off banks' design and license choices, as weapons in negotiation, and to provide fuel for repeated sham litigation, violates Section 2 of the Sherman Act.

[18] And, while patent acquisition and aggregation is the focus of the Clayton Act claim, acquisition is actionable under the Clayton Act only where the effect of such acquisition may be substantially to lessen competition, or to tend to create a monopoly. To establish this effect, Capital One relies on IV's purported "campaign," which could not succeed absent the allegedly sham litigation. [. . .]

[19] Under [Prof. Real Est. Invs., Inc. v. Columbia Pictures Indus., Inc., 508 U.S. 49 (1993)], what I need to determine is whether a reasonable litigant in IV's position could realistically expect to succeed on the merits of its claims in this Court because, if it could, the litigation was not objectively baseless and therefore not sham litigation. . . .

[20] Fatally, Capital One cannot establish that IV's litigation against it was objectively baseless because there were too many indicia of probable cause. Most significantly, in this case, it is undisputed that the parties selected and the Court appointed an independent Special Master (with significant experience handling patent litigation), who wrote two comprehensive reports and recommendations regarding the merits of four of IV's patent claims after the parties submitted cross-motions for summary judgment on patent validity under 35 U.S.C. § 101. Prior to issuing those reports and recommendations, the Special Master resolved multiple discovery disputes; reviewed the parties' extensive formal briefing, as well as supplemental letter briefing that the Special Master requested and twenty-seven exhibits; and heard argument. Under the Special Master's detailed and insightful analysis, IV did succeed on two of its patent claims: the Special Master recommended a judgment of patent eligibility for the '084 and '002 Patents. This fact alone is sufficient to show that a reasonable litigant could realistically expect to succeed on the merits, and it vitiates the notion that the loss before Judge Trenga meant that IV no longer could reasonably believe that it could prevail in this court. And, next to this fact, any other disputes are scintillae.

[21] Moreover, various other undisputed facts also support the finding that IV's litigation in this Court was not objectively baseless. First, there is the presumptive validity of each of the nine patents that were the subjects of IV's claims against Capital One. Second, IV filed both suits before the Supreme Court decided Alice Corp. Pty. v. CLS Bank Int'l, [573 U.S. 208 (2014)] (holding that claims disclosing a computer-implemented scheme for mitigating settlement risk by using a third-party intermediary were not patent eligible under 35 U.S.C. § 101.) . . . I considered *Alice* and the parameters it set for eligibility in concluding that two of the patents before me were not actually patent-eligible. The Special Master did not consider post-*Alice* cases and found that the same patents were patent eligible. This shows that when IV filed suit, before *Alice* was decided, it was realistic to expect success on the merits, at least with regard to these two patents.

[22] Third, IV has not filed any additional suits against Capital One post-*Alice*. Fourth, IV withdrew specific claims when it was persuaded that it would not prevail, suggesting that it reasonably believed it could prevail on the others. Fifth, IV appealed my summary judgment rulings, an extra step that one who did not expect to succeed likely would not bother taking. Sixth, while Capital One incurred significant costs defending IV's patent claims, IV also incurred substantial litigation expenses. The litigation before me has involved nineteen attorneys for IV, as well as a Special Master and an economic consultant, the costs of whom the parties have shared. The docket includes almost 700 entries, and the documents in support of the parties' pending summary judgment briefing exceed 13,000 pages. Seventh, IV did not file for these patents with the Patent and Trademark Office; it acquired them and was entitled to rely on their presumptive validity. Eighth, Judge Trenga ruled that IV's patent infringement action was not an "exceptional case" marked by "unreasonable conduct" that would justify an award of attorneys' fees to Capital One pursuant to 35 U.S.C. § 285. Ninth, IV incurred the significant expense of designating nine experts on objective reasonableness—in comparison to Capital One's failure to designate any—something IV hardly would have done had it thought its underlying patent claims were objectively baseless. Under these circumstances, no reasonable factfinder could conclude that IV lacked probable cause. [. . .]

[23] In sum, not only is Capital One not a competitor of IV, but more significantly, a reasonable litigant in IV's position realistically could have expected to succeed on the merits of its claims in this Court. Therefore, the litigation was not objectively baseless. Consequently, it was not sham litigation, and IV is entitled to *Noerr-Pennington* immunity, as its patent litigation is integral to Capital One's antitrust claims.

(c) Product Hopping

"Product hopping" is the practice of making non-improving changes to a product before the expiry of a patent in order to obtain a fresh term of patent exclusivity. This category includes so-called "hard switch" cases, in which the original is withdrawn from the market, and "soft switch" cases, in which the original product is maintained but demand is directed to the new product. The term is primarily used in the pharmaceutical

context, where it centrally refers to the reformulation of an original drug into a new form, such that generic versions of the original are no longer substitutable for the new one (*e.g.*, from chewable to injectable, or with a different dosage), combined with an effort to encourage clinicians to prescribe the new drug rather than the original.[860] If such a switch is accomplished before a generic drug enters,[861] the generic will arrive on the market only to find that it is not in fact a substitute for the branded drug at which it was aimed—such that it will not be prescribed as a substitute.[862] And a generic seeking approval as a substitute for the *new* version of the branded drug will have to start the long regulatory process again.

The core antitrust concern in such cases is that the product hopper is abusing the patent system—and perhaps other regulatory systems too[863]—in order to extend monopoly and keep out rivals. But this concern is qualified by reluctance to impose antitrust liability for any—or even the combination—of three activities that sound, at least at first blush, like they should virtually always be lawful: the introduction of a new product; the withdrawal of an old product; and the otherwise-lawful acquisition and exercise of rights under the Patent Act. As a result, there is plenty of controversy about the wisdom of antitrust control of product hopping.[864]

Courts and agencies have now had some opportunities to weigh in on the question, and they have expressed a variety of views.[865] The following pages present three perspectives: the FTC's take, as expressed in a 2015 amicus brief on appeal from a district court decision that had expressed skepticism of the product-hopping theory of liability, and the views of the Second and Third Circuits.

Brief For Amicus Curiae Federal Trade Commission Supporting Plaintiff-Appellant, Mylan Pharmaceuticals, Inc. v. Warner-Chilcott PLC

Case No. 15-2236 (3d Cir. filed Sept. 30, 2015)

[1] A typical product-hopping scheme works as follows. A brand-name pharmaceutical company expects generic rivals to win FDA approval to compete with the company's profitable brand-name drug using automatically substitutable AB-rated equivalents. To thwart such substitution, the brand-name company introduces minor changes to the drug's formulation, such as therapeutically insignificant tweaks to dosage levels or to the form of administration (e.g., capsules vs. tablets).

[2] Before generic equivalents have a chance to enter, the brand-name manufacturer then takes various steps to extinguish demand for the original version. For example, the manufacturer might restrict or eliminate the supply of the original formulation, increase its effective price to patients, or flood physician offices with free samples of the revised formulation but not the original to divert prescriptions to the revised formulation. That shift in prescriptions is generally a one-way street: once doctors prescribe a medicine and find that it works, they are

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860 Michael A. Carrier & Steve D. Shadowen, *Product Hopping: A New Framework*, 92 Notre Dame L. Rev. 167, 171 (2016) (defining a product hop as a reformulation of this kind plus the encouragement to clinicians).

861 *See supra* notes 824–829 and accompanying text.

862 Michael A. Carrier & Steve D. Shadowen, *Product Hopping: A New Framework*, 92 Notre Dame L. Rev. 167, 176 (2016).

863 Other regulatory systems that may be abused include state drug product selection laws (which govern substitution of generics for branded drugs) and FDA citizen petition rules (which are intended to allow citizens to raise concerns, but which may be used by incumbents to hinder and deter entry).

864 *See*, *e.g.*, Dennis W. Carlton, Fredrick A. Flyer & Yoad Shefi, *Does The FTC's Theory Of Product Hopping Promote Competition?*, 12 J. Comp. L. 7 Econ. 495 (2016); Michael A. Carrier & Steve D. Shadowen, *Product Hopping: A New Framework*, 92 Notre Dame L. Rev. 167 (2016); M. Sean Royall, Ashley E. Johnson & Jason C. McKenney, *Antitrust Scrutiny of "Product Hopping,"* 28 Antitrust 71 (2013); Michael Carrier, *Provigil: A Case Study of Anticompetitive Behavior*, 3 Hast.. Sci. & Tech. L.J. 441 (2011); Stacey L. Dogan & Mark A. Lemley, *Antitrust Law and Regulatory Gaming*, 87 Tex. L. Rev. 685, 687–88, 708–17 (2009); *see also*, *e.g.*, Steve D. Shadowen et al., *Anticompetitive Product Changes in the Pharmaceutical Industry*, 41 Rutgers L.J. 1, 44–45 (2009).

865 *See*, *e.g.*, Abbott Labs. v. Teva Pharms. USA, Inc., 432 F. Supp. 2d 408 (D. Del. 2006) (denying motion to dismiss and indicating that the rule of reason should be applied to hard-switch product hopping); Walgreen Co. v. AstraZeneca Pharmaceuticals L.P., 534 F. Supp. 2d 146 (D.D.C. 2008) (dismissing complaint alleging a soft switch); In re Suboxone Antitrust Litigation, 64 F. Supp. 3d 665 (E.D. Pa. 2014) (denying motion to dismiss in a case falling somewhere between "hard" and "soft" switching); Mylan Pharms. Inc. v. Warner Chilcott Pub. Ltd. Co., 838 F.3d 421 (3d Cir. 2016) (granting summary judgment for defendant given evidence of nonpretextual purposes, additional competitors, and lack of coercion); New York ex rel. Schneiderman v. Actavis PLC, 787 F.3d 638 (2d Cir. 2015) (granting preliminary injunction to prevent a hard switch); *see also* Brief for FTC as Amicus Curiae, Mylan Pharm., Inc. v. Warner Chilcott Pub. Co., Case No. 12-3824 (E.D. Pa. filed Nov. 21, 2012).

generally reluctant to switch users back to the original formulation even if a cheaper generic version of it later becomes available. Theoretically, third-party payors (e.g., insurers) should have incentives to persuade physicians to switch patients back to generic versions of the original drugs—for example, by announcing that they will deny coverage when a patient shows up at the pharmacy with a prescription for the more expensive new formulation. Empirical research suggests, however, that such efforts have been generally ineffective in influencing physicians' responses to product-hopping behavior. 11

[3] Shifting the market to the reformulated product in this manner can thwart generic entry. As noted, effective generic competition generally depends on automatic substitution at the pharmacy. But automatic substitution ordinarily requires an FDA determination of therapeutic equivalence—an "AB rating." In general, because an AB rating is specific to dosage and form, a pharmacist cannot automatically substitute a generic drug that differs even slightly from the dosage or form of the prescribed brand-name drug. Thus, if a brand-name manufacturer tweaks its brand-name product shortly before anticipated generic entry and begins eliminating the market for the original formulation, it can impede competition from would-be generic entrants, which have sought FDA approval to sell a generic version only of the original formulation and not the replacement. The foiled generic entrant can try to make conforming changes to its own product, but it cannot sell its reformulated version without restarting the FDA approval process (and under certain circumstances provoking patent litigation and automatic regulatory stays). The brand-name manufacturer's well-timed tweaks to its drugs can thus create an ever-retreating horizon of generic competition at the expense of consumers. [. . .]

[4] . . . [T]he Second Circuit recently held in [New York ex rel. Schneiderman v. Actavis PLC, 787 F.3d 638 (2d Cir. 2015)] that a pharmaceutical manufacturer can violate Section 2 if it uses a product-hopping scheme to foreclose rival generic manufacturers from their most efficient distribution channel: automatic substitution at the pharmacy for AB-rated drugs. In that case, a brand-name manufacturer altered the formula for an anti-Alzheimer's drug to avoid automatic generic substitution, and it took various steps, including sharply limiting supply of the legacy version, to ensure that most physicians would prescribe only the reformulated version before the expected date of generic entry. The Second Circuit concluded that because Defendants' forced switch through something other than competition on the merits has the effect of significantly reducing usage of rivals' products and hence protecting its own monopoly, it is anticompetitive. [. . .]

[5] The Second Circuit is hardly alone in so ruling. A number of courts and leading commentators have concluded that, in various circumstances, product-hopping can violate Section 2 of the Sherman Act. The district court [below] departed from that growing consensus by adopting broad rationales that would bar product-hopping liability in almost all circumstances. [. . .]

[6] Genuine pharmaceutical innovation is also unlikely to be chilled simply because antitrust law may hold brand-name manufacturers liable for minor product tweaks that have little or no therapeutic value and serve only to avoid generic competition. First, a manufacturer that incorporates a genuine innovation in its reformulated product can offer that fact as a procompetitive justification. Second, as the *Namenda* court observed, actionable product-hopping conduct typically consists not only of a product reformulation, but also calculated efforts to damage or destroy the market for the original formulation. A company is unlikely to face potential antitrust liability if it does not take targeted steps to damage the market for the original formulation and instead allows the marketplace itself to choose between that formulation and the modified version. But when a brand-name company conducts an anticompetitive product hop with no countervailing justification, the benefits of antitrust enforcement—the promotion of competition and efficient pricing—outweigh any residual risk of chilling actual pharmaceutical innovation. Indeed, if anything, foreclosing antitrust liability in those circumstances might itself sometimes chill genuine innovation.

Product Hopping in the Courts

New York ex rel. Schneiderman v. Actavis PLC, 787 F.3d 638 (2d Cir. 2015); Mylan Pharms. Inc. v. Warner Chilcott Pub. Ltd. Co., 838 F.3d 421 (3d Cir. 2016)

Two prominent discussions of the antitrust assessment of product hopping can be found in the Second Circuit's 2015 decision in *Schneiderman* and the Third Circuit's 2016 decision in *Mylan Pharmaceuticals*.

In *Schneiderman* the Second Circuit granted a preliminary injunction on the theory that a challenge to a "hard switch" had demonstrated a substantial likelihood of success under Section 2. In that case, defendants (Actavis and its subsidiary) had introduced a new version of its Alzheimer's medication, Namenda XR, into the market and "effectively withdr[ew]" the previous version, Namenda IR. This, the court explained, "forced Alzheimer's patients . . . to switch to XR (to which generic IR is not therapeutically equivalent) and would likely impede generic competition by precluding generic substitution through state drug substitution laws."

The Second Circuit approached this practice with a fairly aggressive standard of liability under Section 2. "Well-established case law," the court explained, "makes clear that product redesign is anticompetitive when it coerces consumers and impedes competition." The court relied on its own 1979 decision in Berkey Photo, Inc. v. Eastman Kodak Co., 603 F.2d 263 (2d Cir. 1979), in which it had indicated in *dicta* that Kodak might have faced antitrust liability in that case if it had introduced a desirable new film that only interoperated with Kodak's own newly-developed camera *and had also* ceased to produce its existing film, which was compatible with other manufacturers' cameras. The competitive concern in such a case would be "coercion" of customers to buy Kodak's camera. The *Schneiderman* court cited *Berkey Photo* for the proposition that "[N]either product withdrawal nor product improvement alone is anticompetitive. But . . . when a monopolist combines product withdrawal with some other conduct, the overall effect of which is to coerce consumers rather than persuade them on the merits, and to impede competition, its actions are anticompetitive under the Sherman Act."

Applying that principle to Actavis's conduct, the court held that, while a soft switch would have been lawful, the "hard switch crosses the line from persuasion to coercion and is anticompetitive. As long as Defendants sought to persuade patients and their doctors to switch from Namenda IR to Namenda XR while both were on the market (the soft switch) and with generic IR drugs on the horizon, patients and doctors could evaluate the products and their generics on the merits in furtherance of competitive objectives." The hard switch had eliminated this option, forcing patients to switch when they did not want to do so. The court noted evidence that "Defendants devised the hard switch because they projected that only 30% of memantine-therapy patients would voluntarily switch to Namenda XR prior to generic entry. Defendants' hard switch was expected to transition 80 to 100% of Namenda IR patients to XR prior to generic entry, and thereby impede generic competition."

Defendants raised a series of purported justifications, but the court dismissed them: "All of Defendants' procompetitive justifications for withdrawing IR are pretextual. The record is replete with evidence showing that Defendants were, in the words of Defendants' own CEO, trying to put up barriers or obstacles to generic competition." Of particular note, defendants argued that they were attempting to avoid "free riding," by preventing generics from siphoning off profits from investment in Namenda. But the court rejected that argument out of hand. What defendants were labeling "free riding" was in fact "authorized by law," the "explicit goal of state substitution laws," and consistent with "the goals of the Hatch-Waxman Act by promoting drug competition[.]" Defendants' broader argument, that "antitrust scrutiny of the pharmaceutical industry will . . . deter innovation," met the same fate: "immunizing product hopping from antitrust scrutiny may deter significant innovation by encouraging manufacturers to focus on switching the market to trivial or minor product reformulations rather than investing in the research and development necessary to develop riskier, but medically significant innovations."

In *Mylan Pharmaceuticals* the Third Circuit also confronted a hard switch, but with a different outcome. In that case, the pharmaceutical manufacturer Mayne had for many years been manufacturing and selling (through its U.S. distributor, Warner Chilcott) both branded and generic versions of its drug Doryx—an *unpatented* delayed-release version of doxycycline hyclate, an oral antibiotic—in capsule form. In 1997, Mayne and Warner decided to try to revive flagging profits by switching the market from the old capsules to new, branded-only tablets. Among other things, they stopped selling the capsules to drug wholesalers, removed the capsules from Warner's website, informed market participants that capsules had been "replaced" with tablets, bought back some existing inventory of capsules, and even destroyed some capsule stock.

Then, beginning in 2007, Mayne and Warner began a process of making multiple alterations to the Doryx tablets, each of which required FDA approval: and, crucially, each of which "required generic manufacturers to file, and await approval of, a new ANDA demonstrating the similarities between their product and the

reformulated Doryx product in order to continue selling generics that were AB-rated to the newest Doryx product," and each of which was followed by withdrawal of the older version. Mylan, a generic pharmaceutical manufacturer attempting to keep up with the ever-changing Doryx tablet, sued under Sections 1 and 2.

The court of appeals held that the conduct of Mayne and Warner was not anticompetitive or unlawful. Among other things, Mylan had in fact been able to get to market with a generic version of Doryx, and had reaped "generous profits" from doing so.

But even setting this aside, the court credited "strong evidence of non-pretextual purposes for their various product changes." The switch from capsules to tablets was consistent with evidence linking doxycycline capsules to esophageal problems. Instead, the capsule version "was ultimately banned in France and Sweden, and Defendants faced a products liability lawsuit in Michigan regarding the same problem." The various modifications to the tablets were also supported by evidence of nonpretextual purposes: for example, the switch to a higher-dose tablet could be understood as a response to the availability of competing drugs at various dosage levels, while the introduction of scoring lines on the tablets enabled consumers to "more effectively self-dose" at various levels.

The court expressly acknowledged and distinguished the Second Circuit's *Namenda* decision. Unlike the *Namenda* case, Mayne and Warner here saw "no patent cliffs on the horizon," and they faced significant competition in the relevant market. The *Mylan* court also emphasized the different procedural posture: "*Namenda* merely upheld a preliminary injunction, unlike this case, which proceeded through full discovery and resulted in a robust record void of any evidence of anticompetitive conduct." The *Mylan* court also emphasized that its holding did not "rule out the possibility that certain insignificant design or formula changes, combined with other coercive conduct, could present a closer call with respect to establishing liability in future cases."

After *Schneiderman* and *Mylan*, the door to antitrust liability for product hopping remains somewhat open in the federal courts, albeit wider in some circuits than others.

NOTES

1) "Antitrust is so deferential to minimally plausible uses of the courts that it is virtually powerless to control a wide array of harmful patent abuses." Do you agree? How might Congress fix these problems?
2) Is the power that a PAE wields fairly described as market or monopoly power? How, if it all, does it differ from the power of: (a) any other input supplier; or (b) any entity in a position to threaten to inflict economic harm on a business?
3) Should antitrust have a normative "theory" of the legitimacy of business models, such that PAE activity is treated by antitrust in a more hostile manner than other business models? If so, what other business models should be treated in this way?
4) Is "coercion" an appealing basis for a test of the legality of product hopping? What is the best definition of that concept?
5) Many businesses—supplying everything from stereo systems to software—introduce improved versions of their products and withdraw the original. Does product-hopping law imply that this practice may create antitrust risk outside the pharmaceutical industry? Or is this theory of harm tied to the special nature of pharma regulation?
6) On one view, the "hard switch" product-hopping cases can be understood as a refusal to assist a competitor by continuing to supply a product that the generic pharmaceutical company needs to remain on the market. Can these decisions be reconciled with the courts' hostility to antitrust liability for unilateral refusals to deal?

C. Agreements Involving Intellectual Property

In the previous section we considered purely unilateral conduct: in this section we will turn to agreements and joint conduct involving intellectual property. We will focus on two categories of agreement: intellectual property licenses and agreements settling infringement suits.

1. Licensing Agreements

In general, patent licensing agreements are treated much like other vertical agreements: thus, the rule of reason governs vertical restraints like territorial restrictions.[866] Exclusive licenses, too, which may effectively substitute the licensee for the licensor, are analyzed under the rule of reason.[867] The IP Guidelines state three broad principles to guide courts and businesses:

> (a) [F]or the purpose of antitrust analysis, the Agencies apply the same analysis to conduct involving intellectual property as to conduct involving other forms of property, taking into account the specific characteristics of a particular property right;
>
> (b) the Agencies do not presume that intellectual property creates market power in the antitrust context; and
>
> (c) the Agencies recognize that intellectual property licensing allows firms to combine complementary factors of production and is generally procompetitive.[868]

Courts have sometimes struggled with the question of when and how licensing agreements may violate the antitrust laws, particularly in cases where the licensor is a competitor of its own licensees. In the following two extracts, two courts entertain arguments that a license agreement is being used to "tax" rivals' sales and thus maintain monopoly power—with very different results.

Caldera, Inc. v. Microsoft Corp.

87 F. Supp. 2d 1244 (D. Utah 1999)

Chief Judge Benson.

[1] Caldera . . . alleges that Microsoft's two and three-year per processor licensing agreements with minimum commitments provisions were anticompetitive and unlawful under [the] antitrust laws. Under these agreements an original equipment manufacturer (OEM) was required to pay Microsoft a royalty on every machine the OEM shipped regardless of whether the machine contained [Microsoft's] MS DOS or another operating system. The effect of such an arrangement was that an OEM who chose to install [a competing product, DR DOS,] would pay two royalties on the same machine. Moreover, Caldera asserts that Microsoft required OEMs to make large minimum commitments with up-front payments and that Microsoft's pricing structure rewarded OEMs that made overly-optimistic minimum commitments. Accordingly, OEMs regularly had large prepaid balances when the licenses expired. OEMs would forfeit these balances unless they renewed their licenses with Microsoft. Although Microsoft offered other licensing agreements, Caldera claims that Microsoft coerced OEMs into entering per-processor licenses by offering significant discounts on MS DOS licensed under a per processor agreement. Caldera contends that this conduct was anticompetitive and therefore in violation of both Sections 1 and 2 of the Sherman Antitrust Act.

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[866] Generac Corp. v. Caterpillar Inc., 172 F.3d 971, 977 (7th Cir. 1999) ("[T]his particular agreement was a vertical one in which Generac played the role of supplier and Caterpillar both upstream supplier of the trademark, and downstream purchaser of the finished goods. Unlike horizontal agreements, vertical agreements are per se illegal under Sherman Act § 1 only if they impose minimum price restraints. . . . Vertical non-price restraints, such as the territorial and marketing restrictions at issue in this case, are evaluated under the rule of reason."); Miller Insituform, Inc. v. Insituform of N. Am., Inc., 605 F. Supp. 1125, 1130 (M.D. Tenn. 1985) ("Even if the antitrust laws do apply to the territorial restrictions in INA's patent licensing scheme, such vertical allocations of markets are not per se illegal, but are subject to scrutiny under the rule of reason."); Am. Key Corp. v. Cumberland Assocs., 579 F. Supp. 1245, 1256 (N.D. Ga. 1983) ("As between Sears and Cole plaintiff arguably has established that a contract or combination does in fact exist. The licensing agreement between Sears and Cole is a de facto exclusive dealing agreement similar to a vertical exclusive territory agreement or a franchising agreement. Such agreements are not per se illegal but are governed by the rule of reason.").

[867] *See*, *e.g.*, Am. Needle, Inc. v. New Orleans La. Saints, Case No. 04-cv-7806, 2014 WL 1364022, at *1 (N.D. Ill. Apr. 7, 2014) ("[D]efendants contend that the exclusive license arrangement encouraged additional licensee commitment and had numerous procompetitive effects, including improvements in product design, quality, distribution, and coordination of styles with other apparel items. These contentions are sufficiently supported by evidence and expert opinion to be facially plausible.").

[868] U.S. Dept. of Justice and FTC, ANTITRUST GUIDELINES FOR THE LICENSING OF INTELLECTUAL PROPERTY (2017) § 2.0 at 2.

[2] Ordinarily, the Rule of Reason is employed to determine whether particular concerted action violates Section 1 of the Sherman Act. That is, the fact finder weighs all of the circumstances of a case in deciding whether a restrictive practice should be prohibited as imposing an unreasonable restraint on competition. Here, the alleged facts that OEMs entered into per processor licensing agreements with Microsoft at Microsoft's suggestion and that Microsoft used economic pressure to give OEMs an incentive to enter into per processing agreements is enough evidence of restraint of trade to allow Caldera to proceed on its Section 1 claim. Therefore, the Court denies Microsoft's motion for summary judgment on Caldera's Section 1 claims relating to licensing practices.

[3] Turning to the strength of Caldera's Section 2 claim, the parties agree that the standard for determining whether Microsoft's licensing agreements constitute illegal exclusive dealings was established in Tampa Electric Co. v. Nashville Coal Co., 365 U.S. 320 (1961). In *Tampa Electric* the United States Supreme Court addressed the validity of a requirements contract under the Clayton Act. In evaluating whether an exclusive dealing arrangement violates antitrust law, the Court developed a two-part test: first, the agreement at issue must be exclusive; and second, the agreement must have an adverse effect on competition.

[4] Microsoft argues because per processor agreements did not require an OEM covered by such an agreement to purchase all operating systems from Microsoft it is not an exclusive agreement and Caldera cannot meet the first prong of the *Tampa Electric* test. However, a contract need not be denominated exclusive nor must exclusivity be an express condition of a contract, in order for it to be exclusive under Section 2. An agreement with the "practical effect" of exclusivity is covered. The effect of per processor licenses was that an OEM had to pay two royalties on a computer shipped with an operating system other than MS DOS. A fact-finder could reasonably conclude that this effect coupled with the significant discount offered OEMs who participated in per processor agreements resulted in an agreement with the practical effect of exclusivity.

[5] Microsoft also contends that because new OEMs were always entering the market and a certain number of MS DOS licenses were expiring at any given time, competition was not foreclosed. However, determining whether competition has been foreclosed in a given market requires first, defining the product market, and second, identifying the geographic market by careful selection of the market area in which the seller operates, and to which the purchaser can practicably turn for supplies. Moreover, the competition foreclosed by the contract must be found to constitute a substantial share of the relevant market. That is to say, the opportunities for other traders to enter into or remain in that market must be significantly limited.

[6] The Supreme Court further stated in *Tampa Electric* that to determine whether competition has been significantly limited it is necessary to weigh the probable effect of the contract on the relevant area of effective competition, taking into account the relative strength of the parties, the proportionate volume of commerce involved in relation to the total volume of commerce in the relevant market area, and the probable immediate and future effects which preemption of that share of the market might have on effective competition therein. Applying this to the instant case, Microsoft has not defined the relevant market or properly weighed the factors outlined in *Tampa Electric* to determine whether per processor licenses had a substantial effect on competition. Therefore, Microsoft has not met its burden on this issue for purposes of summary judgment.

[7] Finally, unlike the plaintiff in *Tampa Electric*, Caldera offers Microsoft's licensing scheme as part of a bigger picture of anticompetitive behavior by Microsoft. It is not a discrete claim of exclusive dealing. Microsoft's per processor agreements may not amount to a finding of Section 2 liability standing alone, however, use of per processor licenses viewed in context with other alleged anticompetitive behavior may give rise to a Section 2 violation as complained of by Caldera.

FTC v. Qualcomm Inc.

969 F.3d 974 (9th Cir. 2020)

Judge Callahan.

[1] This case asks us to draw the line between *anti*competitive behavior, which is illegal under federal antitrust law, and *hyper*competitive behavior, which is not. The Federal Trade Commission ("FTC") contends that

Qualcomm Incorporated ("Qualcomm") violated [Sections 1 and 2 of] the Sherman Act by unreasonably restraining trade in, and unlawfully monopolizing, the code division multiple access ("CDMA") and premium long-term evolution ("LTE") cellular modem chip markets. After a ten-day bench trial, the district court agreed and ordered a permanent, worldwide injunction prohibiting several of Qualcomm's core business practices. We granted Qualcomm's request for a stay of the district court's injunction pending appeal. At that time, we characterized the district court's order and injunction as either "a trailblazing application of the antitrust laws" or "an improper excursion beyond the outer limits of the Sherman Act." We now hold that the district court went beyond the scope of the Sherman Act, and we reverse.

[2] Founded in 1985, Qualcomm dubs itself "the world's leading cellular technology company." Over the past several decades, the company has made significant contributions to the technological innovations underlying modern cellular systems, including third-generation ("3G") CDMA and fourth-generation ("4G") LTE cellular standards—the standards practiced in most modern cellphones and "smartphones." Qualcomm protects and profits from its technological innovations through its patents, which it licenses to original equipment manufacturers ("OEMs") whose products (usually cellphones, but also smart cars and other products with cellular applications) practice one or more of Qualcomm's patented technologies.

[3] Qualcomm's patents include cellular standard essential patents ("SEPs"), non-cellular SEPs, and non-SEPs. Cellular SEPs are patents on technologies that international standard-setting organizations ("SSOs") choose to include in technical standards practiced by each new generation of cellular technology. SSOs—also referred to as standards development organizations ("SDOs")—are global collaborations of industry participants that "establish technical specifications to ensure that products from different manufacturers are compatible with each other." Cellular SEPs are necessary to practice a particular cellular standard. Because SEP holders could prevent industry participants from implementing a standard by selectively refusing to license, SSOs require patent holders to commit to license their SEPs on fair, reasonable, and nondiscriminatory ("FRAND") terms before their patents are incorporated into standards.

[4] Some of Qualcomm's SEPs and other patents relate to CDMA and premium LTE technologies—that is, the way cellular devices communicate with the 3G and 4G cellular networks—while others relate to other cellular and non-cellular applications and technologies, such as multimedia, cameras, location detecting, user interfaces, and more. Rather than license its patents individually, Qualcomm generally offers its customers various "patent portfolio" options, whereby the customer/licensee pays for and receives the right to practice all three types of Qualcomm patents (SEPs, non-cellular SEPs, and non-SEPs).

[5] Qualcomm's patent licensing business is very profitable, representing around two-thirds of the company's value. But Qualcomm is no one-trick pony. The company also manufactures and sells cellular modem chips, the hardware that enables cellular devices to practice CDMA and premium LTE technologies and thereby communicate with each other across cellular networks. This makes Qualcomm somewhat unique in the broader cellular services industry. Companies such as Nokia, Ericsson, and Interdigital have comparable SEP portfolios but do not compete with Qualcomm in the modem chip markets. On the other hand, Qualcomm's main competitors in the modem chip markets—companies such as MediaTek, HiSilicon, Samsung LSI, ST-Ericsson, and VIA Telecom (purchased by Intel in 2015)—do not hold or have not held comparable SEP portfolios.

[6] Like its licensing business, Qualcomm's modem chip business has been very successful. From 2006 to 2016, Qualcomm possessed monopoly power in the CDMA modem chip market, including over 90% of market share. From 2011 to 2016, Qualcomm possessed monopoly power in the premium LTE modem chip market, including at least 70% of market share. During these timeframes, Qualcomm leveraged its monopoly power to "charge monopoly prices on [its] modem chips." Around 2015, however, Qualcomm's dominant position in the modem chip markets began to recede, as competitors like Intel and MediaTek found ways to successfully compete. Based on projections from 2017 to 2018, Qualcomm maintains approximately a 79% share of the CDMA modem chip market and a 64% share of the premium LTE modem chip market.[4]

[7] Qualcomm licenses its patent portfolios exclusively at the OEM level, setting the royalty rates on its CDMA and LTE patent portfolios as a percentage of the end-product sales price. This practice is not unique to Qualcomm. As the district court found, "[f]ollowing Qualcomm's lead, other SEP licensors like Nokia and

Ericsson have concluded that licensing only OEMs is more lucrative, and structured their practices accordingly." OEM-level licensing allows these companies to obtain the maximum value for their patented technologies while avoiding the problem of patent exhaustion, whereby "the initial authorized [or licensed] sale of a patented item terminates all patent rights to that item." Due to patent exhaustion, if Qualcomm licensed its SEPs further "upstream" in the manufacturing process to competing chip suppliers, then its patent rights would be exhausted when these rivals sold their products to OEMs. OEMs would then have little incentive to pay Qualcomm for patent licenses, as they could instead become "downstream" recipients of the already exhausted patents embodied in these rivals' products.

[8] Because rival chip manufacturers practice many of Qualcomm's SEPs by necessity, Qualcomm offers these companies what it terms "CDMA ASIC Agreements," wherein Qualcomm promises not to assert its patents in exchange for the company promising not to sell its chips to unlicensed OEMs. These agreements, which essentially function as patent-infringement indemnifications, include reporting requirements that allow Qualcomm to know the details of its rivals' chip supply agreements with various OEMs. But they also allow Qualcomm's competitors to practice Qualcomm's SEPs royalty-free.

[9] Qualcomm reinforces these practices with its so-called "no license, no chips" policy, under which Qualcomm refuses to sell modem chips to OEMs that do not take licenses to practice Qualcomm's SEPs. Otherwise, because of patent exhaustion, OEMs could decline to take licenses, arguing instead that their purchase of chips from Qualcomm extinguished Qualcomm's patent rights with respect to any CDMA or premium LTE technologies embodied in the chips. This would not only prevent Qualcomm from obtaining the maximum value for its patents, it would result in OEMs having to pay more money (in licensing royalties) to purchase and use a competitor's chips, which are unlicensed. Instead, Qualcomm's practices, taken together, are "chip supplier neutral"—that is, OEMs are required to pay a per-unit licensing royalty to Qualcomm for its patent portfolios regardless of which company they choose to source their chips from.

[10] Although Qualcomm's licensing and modem chip businesses have made it a major player in the broader cellular technology market, the company is not an OEM. That is, Qualcomm does not manufacture and sell cellphones and other end-use products (like smart cars) that consumers purchase and use. Thus, it does not "compete"—in the antitrust sense—against OEMs like Apple and Samsung in these product markets. Instead, these OEMs are Qualcomm's *customers*. [. . .]

[11] Qualcomm's competitors in the modem chip markets contend that Qualcomm's business practices, in particular its refusal to license them, have hampered or slowed their ability to develop and retain OEM customer bases, limited their growth, delayed or prevented their entry into the market, and in some cases forced them out of the market entirely. These competitors contend that this result is not just anticompetitive, but a violation of Qualcomm's contractual commitments to two cellular SSOs—the Telecommunications Industry Association ("TIA") and Alliance for Telecommunications Industry Solutions ("ATIS")—to license its SEPs "to all applicants" on FRAND terms.[9] Qualcomm argues that it has no antitrust duty to deal with its rivals, and in any case OEM-level licensing is consistent with Qualcomm's SSO commitments because only OEM products (*i.e.*, cellphones, tablets, etc.) "practice" or "implement" the standards embodied in Qualcomm's SEPs. Furthermore, Qualcomm argues that it substantially complies with the TIA and ATIS requirements by not asserting its patents against rival chipmakers. [. . .]

[12] "To safeguard the incentive to innovate, the possession of monopoly power will not be found unlawful [under § 2] unless it is accompanied by an element of anticompetitive *conduct*." Accordingly, plaintiffs are required to prove "anticompetitive abuse or leverage of monopoly power, or a predatory or exclusionary means of attempting to monopolize the relevant market." "[T]o be condemned as exclusionary, a monopolist's act must

[9] Under the TIA contract, Qualcomm agreed to make its SEPs "available to all applicants under terms and conditions that are reasonable and non-discriminatory and only to the extent necessary for the practice of any or all of the Normative portions for the field of use of practice of the Standard." Under the ATIS contract, Qualcomm committed to making its SEPs "available to applicants desiring to utilize the license for the purpose of implementing the standard under reasonable terms and conditions that are demonstrably free of any unfair discrimination."

have an 'anticompetitive effect' "—that is, it "must harm the competitive *process* and thereby harm consumers." [. . .]

[13] . . . [N]ovel business practices—*especially* in technology markets—should not be conclusively presumed to be unreasonable and therefore illegal without elaborate inquiry as to the precise harm they have caused or the business excuse for their use. Because innovation involves new products and business practices, courts' and economists' initial understanding of these practices will skew initial likelihoods that innovation is anticompetitive and the proper subject of antitrust scrutiny. [. . .]

[14] . . . [We] focus on the impact, if any, of Qualcomm's practices in the area of effective competition: the markets for CDMA and premium LTE modem chips. [. . .]

[15] . . . [T]he district court's primary theory of anticompetitive harm [was] Qualcomm's imposition of an "anticompetitive surcharge" on rival chip suppliers via its licensing royalty rates. According to the district court,

> Qualcomm's unreasonably high royalty rates enable Qualcomm to control rivals' prices because Qualcomm receives the royalty even when an OEM uses one of Qualcomm's rival's chips. Thus, the "all-in" price of any modem chip sold by one of Qualcomm's rivals effectively includes two components: (1) the nominal chip price; and (2) Qualcomm's royalty surcharge.

[16] This central component of the district court's ruling is premised on the district court's findings that Qualcomm's royalty rates are (1) "unreasonably high" because they are improperly based on Qualcomm's monopoly chip market share and handset price instead of the "fair value of Qualcomm's patents," and (2) anticompetitive because they raise costs to OEMs, who pass the extra costs along to consumers and are forced to invest less in other handset features. The FTC agrees with this aspect of the district court's ruling, pointing out that its "reasonableness" determination regarding Qualcomm's royalty rates is a factual finding subject to clear error review and arguing that this finding "was supported by overwhelming evidence."

[17] We hold that the district court's "anticompetitive surcharge" theory fails to state a cogent theory of anticompetitive harm. . . . [E]ven if we were to accept the district court's conclusion that Qualcomm's royalty rates are unreasonable, we conclude that the district court's surcharging theory still fails as a matter of law and logic. [. . .]

[18] . . . [E]ven assuming that a deviation between licensing royalty rates and a patent portfolio's "fair value" could amount to "anticompetitive harm" in the antitrust sense, the primary harms the district court identified here were to the OEMs who agreed to pay Qualcomm's royalty rates—that is, Qualcomm's *customers*, not its *competitors*. These harms were thus located outside the "areas of effective competition"—the markets for CDMA and premium LTE modem chips—and had no direct impact on competition in those markets.

[19] Regardless of the "reasonableness" of Qualcomm's royalty rates, the district court erred in finding that these royalties constitute an "artificial surcharge" on rivals' chip sales. In *Caldera, Inc. v. Microsoft Corp.*, 87 F. Supp. 2d 1244 (D. Utah 1999), the primary case relied upon by the district court for its surcharging theory, Microsoft required OEMs "to pay [it] a royalty on every machine the OEM shipped regardless of whether the machine contained MS DOS or another operating system." This resulted in OEMs having to pay two royalties instead of one for a portion of their product base unless they chose to exclusively install Microsoft's operating system in their products. Microsoft's policy thus had "the practical effect of exclusivity," as it imposed a naked tax on rivals' software even when the end-product—an individual computer installed with a non-Microsoft operating system—contained no added value from Microsoft. The *Caldera* court held that this hidden surcharge, combined with Microsoft's related practices that were designed to secure exclusivity, were sufficient to defeat Microsoft's motion for summary judgment on the question of whether its policy amounted to anticompetitive conduct in violation of § 2.

[20] Qualcomm's licensing royalties are qualitatively different from the per-unit operating-system royalties at issue in *Caldera*. When Qualcomm licenses its SEPs to an OEM, those patent licenses have value—indeed, they are necessary to the OEM's ability to market and sell its cellular products to consumers—regardless of whether the OEM uses Qualcomm's modem chips or chips manufactured and sold by one of Qualcomm's rivals. And unlike *Caldera*, where OEMs who installed non-Microsoft operating systems in some of their products were

required to pay royalties for both the actual operating system *and* MS DOS (which was not installed), here OEMs do not pay twice for SEP licenses when they use non-Qualcomm modem chips. Thus, unlike Microsoft's practice, Qualcomm's practice does not have the "practical effect of exclusivity." Even the FTC concedes that "this case differs from *Caldera* in [that] Qualcomm holds patents practiced by its rivals' chips, and no one disputes that Qualcomm is entitled to collect a royalty equal to the reasonable value of those patents."

[21] In its complaint and in its briefing, the FTC suggests that Qualcomm's royalty rates impose an anticompetitive surcharge on its rivals' sales not for the reasons at play in *Caldera*, but rather because Qualcomm uses its licensing royalties to charge anticompetitive, ultralow prices on its own modem chips—pushing out rivals by squeezing their profit margins and preventing them from making necessary investments in research and development. But this type of "margin squeeze" was rejected as a basis for antitrust liability in [*Pac. Bell Tel. Co. v. Linkline Commc'ns, Inc.*, 555 U.S. 438, 451-52 (2009)]. There, multiple digital subscriber line ("DSL") high-speed internet service providers complained that AT & T was selling them access to AT & T's must-have telephone lines and facilities at inflated wholesale rates and then shifting those increased profits to charge ultra-low rates for DSL services at retail, effectively squeezing these DSL competitors out of the market. The Court rejected the plaintiffs' assertion of anticompetitive harm, holding that AT & T was under no antitrust duty to deal with its competitors on the wholesale level, and that the plaintiffs failed to introduce evidence of predatory pricing (that is, charging below cost) at the retail level.

[22] Here, not only did the FTC offer no evidence that Qualcomm engaged in predatory pricing, the district court's entire antitrust analysis is premised on the opposite proposition: that Qualcomm "charge[s] monopoly prices on modem chips." Indeed, the district court faulted Qualcomm for lowering its prices only when other companies introduced CDMA modem chips to the market to effectively compete. We agree with Qualcomm that this is exactly the type of "garden-variety price competition that the law encourages," and are aware of no authority holding that a monopolist may not lower its rates in response to a competitor's entry into the market with a lower-priced product.

[23] As with its critique of Qualcomm's royalty rates, the district court's analysis of Qualcomm's "no license, no chips" policy focuses almost exclusively on alleged "anticompetitive harms" to OEMs—that is, impacts outside the relevant antitrust market. The district court labeled Qualcomm's policy "anticompetitive conduct against OEMs" and an "anticompetitive practice in patent license negotiations." But the district court failed to identify how the policy directly impacted Qualcomm's competitors or distorted "the area of effective competition." Although OEMs consistently described Qualcomm's "no license, no chips" policy as "unique in the industry," none articulated a cogent theory of anticompetitive harm. Instead, they objected to Qualcomm's licensing royalty rates, which they have to pay *regardless* of whether they chose to purchase their chips from Qualcomm or a competitor (or else risk a patent infringement suit from Qualcomm).

[24] According to the FTC, the problem with "no license, no chips" is that, under the policy, "Qualcomm will not sell chips to a cellphone [OEM] like Apple or Samsung unless the OEM agrees to a license that requires it to pay a substantial per-phone surcharge *even on phones that use rivals' chips*." But this argument is self-defeating: if the condition imposed on gaining access to Qualcomm's chip supply applies regardless of whether the OEM chooses Qualcomm or a competitor (in fact, this appears to be the essence of Qualcomm's policy), then the condition by definition does not distort the "area of effective competition" or impact competitors. At worst, the policy raises the "all-in" price that an OEM must pay for modem chips (chipset + licensing royalties) regardless of which chip supplier the OEM chooses to source its chips from. As we have already discussed, whether that all-in price is reasonable or unreasonable is an issue that sounds in patent law, not antitrust law. Additionally, it involves potential harms to Qualcomm's *customers*, not its competitors, and thus falls outside the relevant antitrust markets.

[25] The district court stopped short of holding that the "no license, no chips" policy itself violates antitrust law. For good reason: neither the Sherman Act nor any other law prohibits companies like Qualcomm from (1) licensing their SEPs independently from their chip sales and collecting royalties, and/or (2) limiting their chip customer base to licensed OEMs. As we have noted, as a general rule, businesses are free to choose the parties with whom they will deal, as well as the prices, terms, and conditions of that dealing. Indeed, the FTC accepts

that this is the state of the law when it concedes that "Qualcomm holds patents practiced by its rivals' chips, and is entitled to collect a royalty on them.

[26] . . . If Qualcomm were to refuse to license its SEPs to OEMs unless they first agreed to purchase Qualcomm's chips ("no chips, no license"), then rival chip suppliers indeed might have an antitrust claim under both §§ 1 and 2 of the Sherman Act based on exclusionary conduct. This is because OEMs cannot sell their products *without* obtaining Qualcomm's SEP licenses, so a "no chips, no license" policy would essentially force OEMs to either purchase Qualcomm's chips or pay for *both* Qualcomm's and a competitor's chips (similar to the no-win situation faced by OEMs in the *Caldera* case). But unlike a hypothetical "no chips, no license" policy, "no license, no chips" is chip-neutral: it makes no difference whether an OEM buys Qualcomm's chip or a rival's chips. The policy only insists that, whatever chip source an OEM chooses, the OEM pay Qualcomm for the right to practice the patented technologies embodied in the chip, as well as in other parts of the phone or other cellular device. [. . .]

[27] Anticompetitive behavior is illegal under federal antitrust law. Hypercompetitive behavior is not. Qualcomm has exercised market dominance in the 3G and 4G cellular modem chip markets for many years, and its business practices have played a powerful and disruptive role in those markets, as well as in the broader cellular services and technology markets. The company has asserted its economic muscle "with vigor, imagination, devotion, and ingenuity." It has also "acted with sharp elbows—as businesses often do." Our job is not to condone or punish Qualcomm for its success, but rather to assess whether the FTC has met its burden under the rule of reason to show that Qualcomm's practices have crossed the line to "conduct which unfairly tends to destroy competition itself." We conclude that the FTC has not met its burden.

NOTES

1) Should antitrust law treat intellectual property licensing agreements differently from other agreements?
2) Are restraints in an IP license always "intrabrand" and thus of secondary concern to antitrust under *GTE Sylvania* (look back at Chapter VI for a fuller discussion)? If not, when is an IP licensing restraint an intrabrand one?
3) The *Caldera* court indicated that an analysis of the per-processor license under Section 1 should turn on different questions than the analysis under Section 2. Do you agree?
4) In light of the extracts from *Caldera* and *Qualcomm* that you have just read: which of the following, if any, should violate Section 2?
    a. A dominant chip manufacturer requires its chip customers to agree that they will pay a $10 fee every time they purchase a chip from a rival.
    b. A dominant chip manufacturer requires its chip customers to agree that they will pay a $10 fee every time they purchase a chip from *any chip supplier*, including itself—and it reduces its own chip price by $10 to avoid losing any chip sales.
    c. A dominant chip manufacturer requires its chip customers to agree that they will pay a $11 fee every time they purchase a chip from any chip supplier—reducing its own chip price by $10 to avoid losing any chip sales—and it throws in an IP license of value $1/chip to those customers.
    d. A dominant chip manufacturer requires its chip customers to agree that they will pay a $11 fee every time they purchase a chip from *any chip supplier*—reducing its own chip price by $10 to avoid losing any chip sales—and it throws in an IP license of uncertain value/chip to those customers?
5) The court in *Qualcomm* notes (at paragraph 6 of the extract) that eventually other chip competitors entered the market and began to erode Qualcomm's very high market share. What is the significance of that fact? If Qualcomm was able to leverage its IP licensing strategy to exclude competitors for 2 years, should that be remedied as an antitrust violation? Five years? Ten years? Six months? Does it matter that antitrust litigation typically takes multiple years from complaint to resolution, even setting aside time required for pre-complaint investigation?

2. Infringement Settlements

Some of the most challenging policy questions on the antitrust / IP interface arise in connection with settlements of intellectual property infringement litigation. In the core case, the basic fact pattern is commonly something

like this: (1) two businesses are actually or potentially active in the same market (*i.e.*, they are at least potential competitors), setting aside all questions of intellectual property; (2) one of them asserts an intellectual property right which, if valid and infringed by the other, would confer the power to exclude the other from the market (or at least to take a price reflecting the value of the right); (3) the parties resolve the actual or threatened litigation between them by entering into a settlement agreement that permits *less* competition that would exist if no intellectual property were in play, but *more* competition than would exist if the rightsholder's intellectual property were valid, infringed, and fully asserted. And, crucially: (4) there is some reason to doubt the validity or infringement of the intellectual property right.

What is antitrust to do? On the one hand, agreements between rivals not to compete are a central evil—perhaps *the* central evil—of antitrust. And it is not obvious that the invocation of a questionable IP claim by one of the rivals changes anything about that situation. On the other hand, there is certainly no general right to compete using a rival's property. And if the intellectual property is indeed valid (which, in the case of a patent right, must be presumed by statute[869]) and if a patent-holder can prove that it has been infringed, then there may very well be *no* lawful competition to be had. On a third hand, we might not want to make the result of an antitrust challenge itself depend on a full trial of the validity and infringement of the IP right—creating a kind of turducken litigation combining some of the most notoriously lengthy and expensive forms of dispute resolution—so a court must likely adjudicate the issue without knowing for sure whether the IP rights in question are indeed valid and infringed. [870] And finally: what role for the policy principle that settlement agreements are to be encouraged?[871]

The leading case on the antitrust treatment of IP settlements—indeed, on the antitrust-IP frontier in general—is the Supreme Court's 2013 *Actavis* decision. *Actavis* dealt with so-called "pay for delay" or "reverse payment" agreements, in which incumbent branded drug companies would enter into agreements with generic would-be entrants who were first to file an ANDA with a Paragraph IV certification challenging the incumbent's patent.[872] In the most common version of a pay-for-delay settlement: the generic would agree to drop its challenge to the validity of the brand's patent; the brand would agree to make a sizeable payment to the generic; and the parties would agree that the generic would have the right to enter the market after a period of delay, but before the expiration of the patent term.

There are significant interests on both sides here. The core competition concern is that "the holder of a dodgy patent may be paying off a would-be competitor and splitting the profits of undeserved monopoly."[873] But then: why shouldn't a patent holder be entitled to avoid the enormous costs and burdens of litigation—as well as the commercial risk of having a key patent invalidated by an adverse decision—with a deal that allows new entry within the term of a (presumed-valid) patent? And a large payment from incumbent to generic need not indicate that the patent is a particularly weak one: it could just represent the high value of the patent to the holder, rather than a high chance of invalidity.

When this issue came up for decision by the Supreme Court, lower courts had taken a range of positions, from a blanket rule that pay-for-delay agreements limiting competition within the scope of a patent claim were *per se* legal, as the Eleventh Circuit had held below,[874] to presumed *illegality* of such agreements, as the Third Circuit had held.[875] The Court took a middle road.

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[869] 35 U.S.C. § 282.

[870] *But see* Rebecca S. Eisenberg & Daniel A. Crane, *Patent Punting: How FDA and Antitrust Courts Undermine the Hatch-Waxman Act to Avoid Dealing with Patents*, 21 Mich. Telecomm. & Tech. L. Rev. 197 (2015) (criticizing "patent punting" by courts).

[871] *See*, *e.g.*, McDermott, Inc. v. AmClyde, 511 U.S. 202, 215 (1994) ("[P]ublic policy wisely encourages settlements.").

[872] *See supra* notes 824–829 and accompanying text.

[873] Daniel Francis, *Making Sense of Monopolization*, 84 Antitrust L.J. 779, 810–11 (2022). *See generally* C. Scott Hemphill, *Paying for Delay: Pharmaceutical Patent Settlement as a Regulatory Design Problem*, 81 N.Y.U. L. Rev. 1553 (2006); Jon Liebowitz, Chairman, FTC, *"Pay for Delay" Settlements in the Pharmaceutical Industry: How Congress Can Stop Anticompetitive Conduct, Protect Consumers' Wallets, and Help Pay for Health Care Reform (the $35 Billion Solution)* 3 (remarks of June 23, 2009).

[874] FTC v. Watson Pharmaceuticals, Inc., 677 F.3d 1298, 1312 (11th Cir. 2012).

[875] In re K–Dur Antitrust Litigation, 686 F.3d 197, 214–218 (3d Cir. 2012).

FTC v. Actavis, Inc.

570 U.S. 136 (2013)

Justice Breyer.

[1] Company A sues Company B for patent infringement. The two companies settle under terms that require (1) Company B, the claimed infringer, not to produce the patented product until the patent's term expires, and (2) Company A, the patentee, to pay B many millions of dollars. Because the settlement requires the patentee to pay the alleged infringer, rather than the other way around, this kind of settlement agreement is often called a "reverse payment" settlement agreement. And the basic question here is whether such an agreement can sometimes unreasonably diminish competition in violation of the antitrust laws.

[2] In this case, the Eleventh Circuit dismissed a Federal Trade Commission (FTC) complaint claiming that a particular reverse payment settlement agreement violated the antitrust laws. In doing so, the Circuit stated that a reverse payment settlement agreement generally is "immune from antitrust attack so long as its anticompetitive effects fall within the scope of the exclusionary potential of the patent." And since the alleged infringer's promise not to enter the patentee's market expired before the patent's term ended, the Circuit found the agreement legal and dismissed the FTC complaint. In our view, however, reverse payment settlements such as the agreement alleged in the complaint before us can sometimes violate the antitrust laws. We consequently hold that the Eleventh Circuit should have allowed the FTC's lawsuit to proceed.

[3] Apparently most if not all reverse payment settlement agreements arise in the context of pharmaceutical drug regulation, and specifically in the context of suits brought under statutory provisions allowing a generic drug manufacturer (seeking speedy marketing approval) to challenge the validity of a patent owned by an already-approved brand-name drug owner. We consequently describe four key features of the relevant drug-regulatory framework established by the Drug Price Competition and Patent Term Restoration Act of 1984. That Act is commonly known as the Hatch-Waxman Act.

[4] First, a drug manufacturer, wishing to market a new prescription drug, must submit a New Drug Application to the federal Food and Drug Administration (FDA) and undergo a long, comprehensive, and costly testing process, after which, if successful, the manufacturer will receive marketing approval from the FDA.

[5] Second, once the FDA has approved a brand-name drug for marketing, a manufacturer of a generic drug can obtain similar marketing approval through use of abbreviated procedures. The Hatch-Waxman Act permits a generic manufacturer to file an Abbreviated New Drug Application specifying that the generic has the "same active ingredients as," and is "biologically equivalent" to, the already-approved brand-name drug. The Hatch-Waxman process, by allowing the generic to piggy-back on the pioneer's approval efforts, "speed[s] the introduction of low-cost generic drugs to market," thereby furthering drug competition.

[6] Third, the Hatch-Waxman Act sets forth special procedures for identifying, and resolving, related patent disputes. It requires the pioneer brand-name manufacturer to list in its New Drug Application the "number and the expiration date" of any relevant patent. And it requires the generic manufacturer in its Abbreviated New Drug Application to "assure the FDA" that the generic "will not infringe" the brand-name's patents.

[7] The generic can provide this assurance in one of several ways. It can certify that the brand-name manufacturer has not listed any relevant patents. It can certify that any relevant patents have expired. It can request approval to market beginning when any still-in-force patents expire. Or, it can certify that any listed, relevant patent "is invalid or will not be infringed by the manufacture, use, or sale" of the drug described in the Abbreviated New Drug Application. Taking this last-mentioned route (called the "paragraph IV" route), automatically counts as patent infringement. If the brand-name patentee brings an infringement suit within 45 days, the FDA then must withhold approving the generic, usually for a 30-month period, while the parties litigate patent validity (or infringement) in court. If the courts decide the matter within that period, the FDA follows that determination; if they do not, the FDA may go forward and give approval to market the generic product.

[8] Fourth, Hatch-Waxman provides a special incentive for a generic to be the first to file an Abbreviated New Drug Application taking the paragraph IV route. That applicant will enjoy a period of 180 days of exclusivity (from the first commercial marketing of its drug). During that period of exclusivity no other generic can compete with the brand-name drug. If the first-to-file generic manufacturer can overcome any patent obstacle and bring the generic to market, this 180-day period of exclusivity can prove valuable, possibly worth several hundred million dollars. Indeed, the Generic Pharmaceutical Association said in 2006 that the vast majority of potential profits for a generic drug manufacturer materialize during the 180-day exclusivity period. The 180-day exclusivity period, however, can belong only to the first generic to file. Should that first-to-file generic forfeit the exclusivity right in one of the ways specified by statute, no other generic can obtain it.

[9] In 1999, Solvay Pharmaceuticals, a respondent here, filed a New Drug Application for a brand-name drug called AndroGel. The FDA approved the application in 2000. In 2003, Solvay obtained a relevant patent and disclosed that fact to the FDA, as Hatch-Waxman requires.

[10] Later the same year another respondent, Actavis, Inc. (then known as Watson Pharmaceuticals), filed an Abbreviated New Drug Application for a generic drug modeled after AndroGel. Subsequently, Paddock Laboratories, also a respondent, separately filed an Abbreviated New Drug Application for its own generic product. Both Actavis and Paddock certified under paragraph IV that Solvay's listed patent was invalid and their drugs did not infringe it. A fourth manufacturer, Par Pharmaceutical, likewise a respondent, did not file an application of its own but joined forces with Paddock, agreeing to share the patent litigation costs in return for a share of profits if Paddock obtained approval for its generic drug.

[11] Solvay initiated paragraph IV patent litigation against Actavis and Paddock. Thirty months later the FDA approved Actavis' first-to-file generic product, but, in 2006, the patent-litigation parties all settled. Under the terms of the settlement Actavis agreed that it would not bring its generic to market until August 31, 2015, 65 months before Solvay's patent expired (unless someone else marketed a generic sooner). Actavis also agreed to promote AndroGel to urologists. The other generic manufacturers made roughly similar promises. And Solvay agreed to pay millions of dollars to each generic—$12 million in total to Paddock; $60 million in total to Par; and an estimated $19–$30 million annually, for nine years, to Actavis. The companies described these payments as compensation for other services the generics promised to perform, but the FTC contends the other services had little value. According to the FTC the true point of the payments was to compensate the generics for agreeing not to compete against AndroGel until 2015.

[12] On January 29, 2009, the FTC filed this lawsuit against all the settling parties . . . . The FTC's complaint (as since amended) alleged that respondents violated § 5 of the Federal Trade Commission Act by unlawfully agreeing to share in Solvay's monopoly profits, abandon their patent challenges, and refrain from launching their low-cost generic products to compete with AndroGel for nine years. The District Court held that these allegations did not set forth an antitrust law violation. It accordingly dismissed the FTC's complaint. The FTC appealed.

[13] The Court of Appeals for the Eleventh Circuit affirmed the District Court. It wrote that "absent sham litigation or fraud in obtaining the patent, a reverse payment settlement is immune from antitrust attack so long as its anticompetitive effects fall within the scope of the exclusionary potential of the patent." The court recognized that "antitrust laws typically prohibit agreements where one company pays a potential competitor not to enter the market." But, the court found that "reverse payment settlements of patent litigation present atypical cases because one of the parties owns a patent." Patent holders have a "lawful right to exclude others from the market"; thus a patent "conveys the right to cripple competition." The court recognized that, if the parties to this sort of case do not settle, a court might declare the patent invalid. But, in light of the public policy favoring settlement of disputes (among other considerations) it held that the courts could not require the parties to continue to litigate in order to avoid antitrust liability. . . .

[14] Solvay's patent, if valid and infringed, might have permitted it to charge drug prices sufficient to recoup the reverse settlement payments it agreed to make to its potential generic competitors. And we are willing to take this fact as evidence that the agreement's "anticompetitive effects fall within the scope of the exclusionary

potential of the patent." But we do not agree that that fact, or characterization, can immunize the agreement from antitrust attack.

[15] For one thing, to refer, as the Circuit referred, simply to what the holder of a valid patent could do does not by itself answer the antitrust question. The patent here may or may not be valid, and may or may not be infringed. "[A] *valid* patent excludes all except its owner from the use of the protected process or product." And that exclusion may permit the patent owner to charge a higher-than-competitive price for the patented product. But an *invalidated* patent carries with it no such right. And even a valid patent confers no right to exclude products or processes that do not actually infringe. The paragraph IV litigation in this case put the patent's validity at issue, as well as its actual preclusive scope. The parties' settlement ended that litigation. The FTC alleges that in substance, the plaintiff agreed to pay the defendants many millions of dollars to stay out of its market, even though the defendants did not have any claim that the plaintiff was liable to them for damages. That form of settlement is unusual. And, for reasons discussed [below], there is reason for concern that settlements taking this form tend to have significant adverse effects on competition.

[16] Given these factors, it would be incongruous to determine antitrust legality by measuring the settlement's anticompetitive effects solely against patent law policy, rather than by measuring them against procompetitive antitrust policies as well. And indeed, contrary to the Circuit's view that the only pertinent question is whether the settlement agreement falls within the legitimate scope of the patent's exclusionary potential, this Court has indicated that patent and antitrust policies are both relevant in determining the "scope of the patent monopoly"—and consequently antitrust law immunity—that is conferred by a patent. [. . .]

[17] . . .[T]he Hatch-Waxman Act itself does not embody a statutory policy that supports the Eleventh Circuit's view. Rather, the general procompetitive thrust of the statute, its specific provisions facilitating challenges to a patent's validity, and its later-added provisions requiring parties to a patent dispute triggered by a paragraph IV filing to report settlement terms to the FTC and the Antitrust Division of the Department of Justice, all suggest the contrary. . . .

[18] The Eleventh Circuit's conclusion finds some degree of support in a general legal policy favoring the settlement of disputes. The Circuit's related underlying practical concern consists of its fear that antitrust scrutiny of a reverse payment agreement would require the parties to litigate the validity of the patent in order to demonstrate what would have happened to competition in the absence of the settlement. Any such litigation will prove time consuming, complex, and expensive. The antitrust game, the Circuit may believe, would not be worth that litigation candle.

[19] We recognize the value of settlements and the patent litigation problem. But we nonetheless conclude that this patent-related factor should not determine the result here. Rather, five sets of considerations lead us to conclude that the FTC should have been given the opportunity to prove its antitrust claim.

[20] *First*, the specific restraint at issue has the "potential for genuine adverse effects on competition." The payment in effect amounts to a purchase by the patentee of the exclusive right to sell its product, a right it already claims but would lose if the patent litigation were to continue and the patent were held invalid or not infringed by the generic product. Suppose, for example, that the exclusive right to sell produces $50 million in supracompetitive profits per year for the patentee. And suppose further that the patent has 10 more years to run. Continued litigation, if it results in patent invalidation or a finding of noninfringement, could cost the patentee $500 million in lost revenues, a sum that then would flow in large part to consumers in the form of lower prices.

[21] We concede that settlement on terms permitting the patent challenger to enter the market before the patent expires would also bring about competition, again to the consumer's benefit. But settlement on the terms said by the FTC to be at issue here—payment in return for staying out of the market—simply keeps prices at patentee-set levels, potentially producing the full patent-related $500 million monopoly return while dividing that return between the challenged patentee and the patent challenger. The patentee and the challenger gain; the consumer loses. Indeed, there are indications that patentees sometimes pay a generic challenger a sum even larger than what the generic would gain in profits if it won the paragraph IV litigation and entered the market. The rationale behind a payment of this size cannot in every case be supported by traditional settlement

considerations. The payment may instead provide strong evidence that the patentee seeks to induce the generic challenger to abandon its claim with a share of its monopoly profits that would otherwise be lost in the competitive market.

[22] But, one might ask, as a practical matter would the parties be able to enter into such an anticompetitive agreement? Would not a high reverse payment signal to other potential challengers that the patentee lacks confidence in its patent, thereby provoking additional challenges, perhaps too many for the patentee to "buy off?" Two special features of Hatch-Waxman mean that the answer to this question is "not necessarily so." First, under Hatch-Waxman only the first challenger gains the special advantage of 180 days of an exclusive right to sell a generic version of the brand-name product. And as noted, that right has proved valuable—indeed, it can be worth several hundred million dollars. Subsequent challengers cannot secure that exclusivity period, and thus stand to win significantly less than the first if they bring a successful paragraph IV challenge. That is, if subsequent litigation results in invalidation of the patent, or a ruling that the patent is not infringed, that litigation victory will free not just the challenger to compete, but all other potential competitors too (once they obtain FDA approval). The potential reward available to a subsequent challenger being significantly less, the patentee's payment to the initial challenger (in return for not pressing the patent challenge) will not necessarily provoke subsequent challenges. Second, a generic that files a paragraph IV after learning that the first filer has settled will (if sued by the brand-name) have to wait out a stay period of (roughly) 30 months before the FDA may approve its application, just as the first filer did. These features together mean that a reverse payment settlement with the first filer (or, as in this case, *all* of the initial filers) "removes from consideration the most motivated challenger, and the one closest to introducing competition." The dissent may doubt these provisions matter, but scholars in the field tell us that "where only one party owns a patent, it is virtually unheard of outside of pharmaceuticals for that party to pay an accused infringer to settle the lawsuit." It may well be that Hatch-Waxman's unique regulatory framework, including the special advantage that the 180–day exclusivity period gives to first filers, does much to explain why in this context, but not others, the patentee's ordinary incentives to resist paying off challengers (*i.e.,* the fear of provoking myriad other challengers) appear to be more frequently overcome.

[23] *Second*, these anticompetitive consequences will at least sometimes prove unjustified. As the FTC admits, offsetting or redeeming virtues are sometimes present. The reverse payment, for example, may amount to no more than a rough approximation of the litigation expenses saved through the settlement. That payment may reflect compensation for other services that the generic has promised to perform—such as distributing the patented item or helping to develop a market for that item. There may be other justifications. Where a reverse payment reflects traditional settlement considerations, such as avoided litigation costs or fair value for services, there is not the same concern that a patentee is using its monopoly profits to avoid the risk of patent invalidation or a finding of noninfringement. In such cases, the parties may have provided for a reverse payment without having sought or brought about the anticompetitive consequences we mentioned above. But that possibility does not justify dismissing the FTC's complaint. An antitrust defendant may show in the antitrust proceeding that legitimate justifications are present, thereby explaining the presence of the challenged term and showing the lawfulness of that term under the rule of reason.

[24] *Third*, where a reverse payment threatens to work unjustified anticompetitive harm, the patentee likely possesses the power to bring that harm about in practice. At least, the size of the payment from a branded drug manufacturer to a prospective generic is itself a strong indicator of power—namely, the power to charge prices higher than the competitive level. An important patent itself helps to assure such power. Neither is a firm without that power likely to pay large sums to induce others to stay out of its market. In any event, the Commission has referred to studies showing that reverse payment agreements are associated with the presence of higher-than-competitive profits—a strong indication of market power.

[25] *Fourth*, an antitrust action is likely to prove more feasible administratively than the Eleventh Circuit believed. The Circuit's holding does avoid the need to litigate the patent's validity (and also, any question of infringement). But to do so, it throws the baby out with the bath water, and there is no need to take that drastic step. That is because it is normally not necessary to litigate patent validity to answer the antitrust question (unless, perhaps, to determine whether the patent litigation is a sham). An unexplained large reverse payment

itself would normally suggest that the patentee has serious doubts about the patent's survival. And that fact, in turn, suggests that the payment's objective is to maintain supracompetitive prices to be shared among the patentee and the challenger rather than face what might have been a competitive market—the very anticompetitive consequence that underlies the claim of antitrust unlawfulness. The owner of a particularly valuable patent might contend, of course, that even a small risk of invalidity justifies a large payment. But, be that as it may, the payment (if otherwise unexplained) likely seeks to prevent the risk of competition. And, as we have said, that consequence constitutes the relevant anticompetitive harm. In a word, the size of the unexplained reverse payment can provide a workable surrogate for a patent's weakness, all without forcing a court to conduct a detailed exploration of the validity of the patent itself.

[26] *Fifth*, the fact that a large, unjustified reverse payment risks antitrust liability does not prevent litigating parties from settling their lawsuit. They may, as in other industries, settle in other ways, for example, by allowing the generic manufacturer to enter the patentee's market prior to the patent's expiration, without the patentee paying the challenger to stay out prior to that point. Although the parties may have reasons to prefer settlements that include reverse payments, the relevant antitrust question is: What are those reasons? If the basic reason is a desire to maintain and to share patent-generated monopoly profits, then, in the absence of some other justification, the antitrust laws are likely to forbid the arrangement. [. . .]

[27] The FTC urges us to hold that reverse payment settlement agreements are presumptively unlawful and that courts reviewing such agreements should proceed via a "quick look" approach, rather than applying a "rule of reason." We decline to do so. In [California Dental Ass'n v. FTC, 526 U.S. 756 (1999)] {*Eds.: You may remember this case from Chapter V*}, we held (unanimously) that abandonment of the "rule of reason" in favor of presumptive rules (or a "quick-look" approach) is appropriate only where an observer with even a rudimentary understanding of economics could conclude that the arrangements in question would have an anticompetitive effect on customers and markets. We do not believe that reverse payment settlements, in the context we here discuss, meet this criterion.

[28] That is because the likelihood of a reverse payment bringing about anticompetitive effects depends upon its size, its scale in relation to the payor's anticipated future litigation costs, its independence from other services for which it might represent payment, and the lack of any other convincing justification. The existence and degree of any anticompetitive consequence may also vary as among industries. These complexities lead us to conclude that the FTC must prove its case as in other rule-of-reason cases.

[29] To say this is not to require the courts to insist, contrary to what we have said, that the Commission need litigate the patent's validity, empirically demonstrate the virtues or vices of the patent system, present every possible supporting fact or refute every possible pro-defense theory. As a leading antitrust scholar has pointed out, there is always something of a sliding scale in appraising reasonableness, and as such the quality of proof required should vary with the circumstances.

[30] As in other areas of law, trial courts can structure antitrust litigation so as to avoid, on the one hand, the use of antitrust theories too abbreviated to permit proper analysis, and, on the other, consideration of every possible fact or theory irrespective of the minimal light it may shed on the basic question—that of the presence of significant unjustified anticompetitive consequences. We therefore leave to the lower courts the structuring of the present rule-of-reason antitrust litigation. We reverse the judgment of the Eleventh Circuit. And we remand the case for further proceedings consistent with this opinion. . . .

Chief Justice Roberts, with whom Justice Scalia and Justice Thomas join, dissenting.

[31] [. . .] A patent carves out an exception to the applicability of antitrust laws. The correct approach should therefore be to ask whether the settlement gives Solvay monopoly power beyond what the patent already gave it. The Court, however, departs from this approach, and would instead use antitrust law's amorphous rule of reason to inquire into the anticompetitive effects of such settlements. This novel approach is without support in any statute, and will discourage the settlement of patent litigation. [. . .]

[32] We have never held that it violates antitrust law for a competitor to refrain from challenging a patent. And by extension, we have long recognized that the settlement of patent litigation does not by itself violate the

antitrust laws. Like most litigation, patent litigation is settled all the time, and such settlements—which can include agreements that clearly violate antitrust law, such as licenses that fix prices, or agreements among competitors to divide territory—do not ordinarily subject the litigants to antitrust liability.

[33] The key, of course, is that the patent holder—when doing anything, including settling—must act within the scope of the patent. If its actions go beyond the monopoly powers conferred by the patent, we have held that such actions are subject to antitrust scrutiny. If its actions are within the scope of the patent, they are not subject to antitrust scrutiny, with two exceptions concededly not applicable here: (1) when the parties settle sham litigation, and (2) when the litigation involves a patent obtained through fraud on the Patent and Trademark Office.

[34] Thus, under our precedent, this is a fairly straight-forward case. Solvay paid a competitor to respect its patent—conduct which did not exceed the scope of its patent. . . . As in any settlement, Solvay gave its competitors something of value (money) and, in exchange, its competitors gave it something of value (dropping their legal claims). In doing so, they put an end to litigation that had been dragging on for three years. Ordinarily, we would think this a good thing.

[35] Today, however, the Court announces a new rule. It is willing to accept that Solvay's actions did not exceed the scope of its patent. But it does not agree that this is enough to immunize the agreement from antitrust attack. According to the majority, if a patent holder settles litigation by paying an alleged infringer a "large and unjustified" payment, in exchange for having the alleged infringer honor the patent, a court should employ the antitrust rule of reason to determine whether the settlement violates antitrust law.

[36] The Court's justifications for this holding are unpersuasive. First, the majority explains that "the patent here may or may not be valid, and may or may not be infringed." Because there is "uncertainty" about whether the patent is actually valid, the Court says that any questions regarding the legality of the settlement should be "measur[ed]" by "procompetitive antitrust policies," rather than "patent law policy." This simply states the conclusion. The difficulty with such an approach is that a patent holder acting within the scope of its patent has an obvious defense to any antitrust suit: that its patent allows it to engage in conduct that would otherwise violate the antitrust laws. But again, that's the whole point of a patent: to confer a limited monopoly. The problem, as the Court correctly recognizes, is that we're not quite certain if the patent is actually valid, or if the competitor is infringing it. But that is always the case, and is plainly a question of patent law. [. . .]

[37] . . . A patent exempts its holder from the antitrust laws only insofar as the holder operates within the scope of the patent. When the holder steps outside the scope of the patent, he can no longer use the patent as his defense. The majority points to *no* case where a patent settlement was subject to antitrust scrutiny merely because the validity of the patent was uncertain. Not one. It is remarkable, and surely worth something, that in the 123 years since the Sherman Act was passed, we have never let antitrust law cross that Rubicon.

[38] Next, the majority points to the "general procompetitive thrust" of the Hatch-Waxman Act, the fact that Hatch-Waxman "facilitat[es] challenges to a patent's validity," and its "provisions requiring parties to [such] patent dispute[s] to report settlement terms to the FTC and the Antitrust Division of the Department of Justice." The Hatch-Waxman Act surely seeks to encourage competition in the drug market. And, like every law, it accomplishes its ends through specific provisions. . . . But it should by now be trite—and unnecessary—to say that "no legislation pursues its purposes at all costs" and that "it frustrates rather than effectuates legislative intent simplistically to assume that *whatever* furthers the statute's primary objective must be the law." . . . Indeed, for whatever it may be worth, Congress has repeatedly declined to enact legislation addressing the issue the Court takes on today. [. . .]

[39] The majority suggests that "apparently most if not all reverse payment settlement agreements arise in the context of pharmaceutical drug regulation." This claim is not supported empirically by anything the majority cites, and seems unlikely. The term "reverse payment agreement"—coined to create the impression that such settlements are unique—simply highlights the fact that the party suing ends up paying. But this is no anomaly, nor is it evidence of a nefarious plot; it simply results from the fact that the patent holder plaintiff is a defendant against an invalidity counterclaim—not a rare situation in intellectual property litigation. Whatever one might

call them, such settlements—paying an alleged infringer to drop its invalidity claim—are a well-known feature of intellectual property litigation, and reflect an intuitive way to settle such disputes. To the extent there are not scores and scores of these settlements to point to, this is because such settlements—outside the context of Hatch-Waxman—are private agreements that for obvious reasons are generally not appealed, nor publicly available. [. . .]

[40] The majority seems to think that *even if* the patent is valid, a patent holder violates the antitrust laws merely because the settlement took away some chance that his patent would be declared invalid by a court. This is flawed for several reasons.

[41] First, a patent is either valid or invalid. The parties of course don't know the answer with certainty at the outset of litigation; hence the litigation. But the same is true of any hard legal question that is yet to be adjudicated. Just because people don't know the answer doesn't mean there is no answer until a court declares one. Yet the majority would impose antitrust liability based on the parties' subjective uncertainty about that legal conclusion.

[42] The Court does so on the assumption that offering a "large" sum is reliable evidence that the patent holder has serious doubts about the patent. Not true. A patent holder may be 95% sure about the validity of its patent, but particularly risk averse or litigation averse, and willing to pay a good deal of money to rid itself of the 5% chance of a finding of invalidity. What is actually motivating a patent holder is apparently a question district courts will have to resolve on a case-by-case basis. The task of trying to discern whether a patent holder is motivated by uncertainty about its patent, or other legitimate factors like risk aversion, will be made all the more difficult by the fact that much of the evidence about the party's motivation may be embedded in legal advice from its attorney, which would presumably be shielded from discovery. . . .

[43] The irony of all this is that the majority's decision may very well discourage generics from challenging pharmaceutical patents in the first place. Patent litigation is costly, time consuming, and uncertain. Generics enter this risky terrain only after careful analysis of the potential gains if they prevail and the potential exposure if they lose. Taking the prospect of settlements off the table—or limiting settlements to an earlier entry date for the generic, which may still be many years in the future—puts a damper on the generic's expected value going into litigation, and decreases its incentive to sue in the first place. The majority assures us, with no support, that everything will be okay because the parties can settle by simply negotiating an earlier entry date for the generic drug manufacturer, rather than settling with money. But it's a matter of common sense, confirmed by experience, that parties are more likely to settle when they have a broader set of valuable things to trade.

[44] . . . I would keep things as they were and not subject basic questions of patent law to an unbounded inquiry under antitrust law, with its treble damages and famously burdensome discovery. . . .

* * *

As we have already seen, in *1-800-Contacts* the Second Circuit held that a trademark settlement that involved commitments to not to bid on advertising that responded to competitors' trademarked keywords should be analyzed under the rule of reason.[876] In that case, the Second Circuit applied its earlier *Clorox* decision. Did *Clorox* fully anticipate *Actavis*?

CASENOTE: Clorox Co. v. Sterling Winthrop, Inc.

117 F.3d 50 (2d Cir. 1997)

Clorox was a tale of two trademarks: PINE-SOL and LYSOL. Their respective owners, Clorox and Reckitt, were competitors in the all-purpose household cleaning market: Clorox through its PINE-SOL line, and Reckitt through its LYSOL line. Both trademarks were of long standing. The PINE-SOL trademark had been used since at least 1945, and was federally registered in 1957. The LYSOL mark—particularly associated with aerosol

[876] *See supra* Chapter V.

spray disinfectants—was the senior mark: it had been federally registered for disinfectants in 1906, and for cleaning products in general in the 1920s. Both trademarks had passed through various hands over their long history before ending up with Clorox and Reckitt respectively.

Throughout the long shared history of the two trademarks, their respective owners had continually sparred, and litigated, regarding their respective rights of use and the risks of confusion between the two marks. On three occasions—in 1956, 1967, and 1987—the marks' respective owners settled litigation between them by reaching agreements on the ways in which the parties could use their marks (and particularly the ways in which the PINE-SOL owner could use its mark, given the LYSOL owner's objective to keep PINE-SOL out of the disinfectant space). For example, in 1956, the owner of the PINE-SOL mark agreed to use the trademark only in connection with preparations that used pine oil as an active ingredient. In 1967, that agreement was amended to provide that the owner of the PINE-SOL mark would not use it on any "disinfectant product," to permit the PINE-SOL owner to introduce products in certain categories (such as soaps), and to require that it discontinue a PINE-SOL spray disinfectant that had triggered suit from the LYSOL owner.

But the crucial agreement was the 1987 one, in which the PINE-SOL owner obtained permission to market a "multi-purpose pump spray household cleaner with disinfecting properties," subject to certain conditions. Those conditions provided that, among other things: (1) only one "form, scent, or formula" of the PINE-SOL basic liquid cleaner and pump spray could be sold in any geographic area at one time; (2) the original PINE-SOL product would be advertised primarily as a cleaner, not a disinfectant; and (3) PINE-SOL products could not be sold as anything other than generic cleaners (rather than, say, bathroom cleaners, or for other special purposes). In the same agreement, the LYSOL owner obtained permission to market a "pine action" cleaner under the LYSOL mark.

The resulting peace was not destined to last. In 1992, Clorox—by now the owner of the PINE-SOL mark—aired a commercial that, in the view of the owner of the LYSOL mark, emphasized PINE-SOL's disinfectant properties. The owner of the LYSOL mark sued (of course) to enjoin the commercial. In return, Clorox filed its own lawsuit, alleging that the 1987 agreement violated Section 1 and Section 2 by limiting Clorox's freedom to compete and by perpetuating a monopoly in certain cleaner-disinfectant markets. The district court granted summary judgment for the defendant on the ground that the 1987 agreement was not anticompetitive, and Clorox appealed.

Reviewing this long and sorry history, the Second Circuit began its legal analysis by noting that "Clorox challenges a trademark agreement," and that such agreements "are common, and favored, under the law." As the agreement did not create any restraint that was recognized as *per se* illegal, the rule of reason would govern.

Applying that standard, Clorox faced a "difficult task" of showing competitive harm. Trademarks, unlike other forms of IP, are "by their nature non-exclusionary." In particular, "[b]ecause a trademark merely enables the owner to bar others from use of the mark, as distinguished from competitive manufacture and sale of identical goods bearing another mark, the opportunity for effective antitrust misuse of a trademark" was very limited. The court concluded that the 1987 agreement imposed a particularly modest restriction: "it does not in any way restrict Clorox from producing and selling products that compete directly with the LYSOL brand, so long as they are marketed under a brand name other than PINE–SOL. Accordingly, at first blush it would not appear to restrict Clorox's, much less any other competitor's, ability to compete[.]"

Clorox argued that this restriction was, in reality, not so modest. In the realm of mass-marketed consumer products, it claimed, established brand names are critical. Accordingly, if deprived of the ability to use the PINE–SOL name, Clorox could not "effectively penetrate the alleged disinfectant cleaning markets dominated by the popular LYSOL brand."

But the court was not persuaded. For one thing, the CLOROX trademark itself was "a megabrand with substantial brand equity." Indeed, Clorox "has enjoyed great success in extending its own name into new cleaning-market niches, and developing new products under new names in the past." Moreover, there were many other competitors in the market able to exert competitive pressure against the LYSOL line of products. "The overall household cleaning industry is the battleground of some of the largest corporations in the country,

wielding numerous megabrands. The industry is made up of firms with the resources to develop new products and market them, as these companies have repeatedly done. . . . Each of these major corporations, like Clorox, has significant goodwill attached to its own name, and to the trademarks it owns." In light of the abundant opportunities for competition, the court concluded that "[t]he agreement simply does not significantly restrict Clorox's, or other competitors', ability to enter [the alleged relevant] markets."

For completeness's sake, the court also pointed out that the 1987 agreement was supported by procompetitive justifications. In particular, "trademark agreements are favored in the law as a means by which parties agree to market products in a way that reduces the likelihood of consumer confusion and avoids time-consuming litigation." As a result:

> in the absence of any evidence that the provisions relating to trademark protection are auxiliary to an underlying illegal agreement between competitors . . . and absent exceptional circumstances, we believe the parties' determination of the scope of needed trademark protections is entitled to substantial weight. At the time of the execution of such an agreement, the parties are in the best position to determine what protections are needed and how to resolve disputes concerning earlier trademark agreements between themselves. While the intent of the parties may not always be determinative, it is usually unwise for courts to second-guess such decisions. In the absence of evidence to the contrary it is reasonable to presume that such arms-length agreements are pro-competitive.

In so holding, the Second Circuit marked out the line to which it would return almost 25 years later in the *1-800 Contacts* litigation.[877]

NOTES

1) Has the *Actavis* Court provided a workable standard for assessing reverse payment settlement agreements? Specifically, is the size of the payment a good proxy for the likelihood that the defendant would have prevailed in the litigation, and would have entered but for the settlement? What is a "large" payment?
2) In 2019 the FTC issued a report assessing how pharmaceutical companies were adjusting their behavior in the post-*Actavis* environment. The FTC found that the pharma industry was now "largely avoiding reverse payments," although they were finding other ways to settle that were less likely to draw antitrust scrutiny, including, for example, by pegging payments to anticipated savings in litigation costs. *See Then, Now, and Down the Road: Trends in Pharmaceutical Patent Settlements after FTC v. Actavis*, https://www.ftc.gov/enforcement/competition-matters/2019/05/then-now-down-road-trends-pharmaceutical-patent-settlements-after-ftc-v-actavis.
3) At paragraph 25 of the *Actavis* extract, the Court says something very interesting: "the payment (if otherwise unexplained) likely seeks to prevent the risk of competition. And, as we have said, that consequence constitutes the relevant anticompetitive harm." And the Court indicates in the same paragraph that this reasoning applies even when the risk is "small." Is this consistent with antitrust's approach to the loss of a "small" risk of competition in Section 1, Section 2, or Section 7 cases?[878]
4) When, if ever, should a restrictive trademark agreement like the one in *Clorox* be condemned? Would your answer change if the agreement dealt with patent rights rather than a trademark?
5) Do you agree with the *Clorox* court's observations at paragraph 19 that: "[T]he parties are in the best position to determine what protections are needed and how to resolve disputes concerning earlier trademark agreements between themselves. While the intent of the parties may not always be determinative, it is usually unwise for courts to second-guess such decisions. In the absence of evidence to the contrary it is reasonable to presume that such arms-length agreements are [procompetitive]"? Who is injured, and who is benefited, by an anticompetitive agreement of this kind?
6) Federal trademark law contains a doctrine of "nominative fair use" that is intended to insulate at least some uses of trademarks for the purpose of comparative advertising. Are the potential competitive harms created

[877] *See supra* § V.D.

[878] *Compare*, *e.g.*, FTC v. Steris Corp., 133 F.Supp.3d 962 (N.D. Ohio 2015) (potential competition merger case).

by trademark agreements like the one in *Clorox* and *1-800-Contacts* (see Chapter V) better handled through antitrust, or through legislative and judicial development of trademark's internal doctrines, such as nominative fair use, in a way that is sensitive to competition concerns? And are those options substitutes or complements?

D. Standard Setting and Standard-Essential Patents

A fertile source of controversy and antitrust litigation is the field of "standard-setting," or "standards development," activity. This is the—mostly private and voluntary—process of collaboration among market participants, through an array of various standard setting organizations ("SSOs"; also standards development organizations ("SDOs")) to establish industry standards. Prominent SSOs include the Institute of Electrical and Electronics Engineers ("IEEE"), the American National Standards Institute ("ANSI"), the Internet Engineering Task Force ("IETF"), the International Organization for Standardization ("ISO"), the International Telecommunications Union ("ITU"), the World Wide Web Consortium (W3C), and many others.

These SSOs create and amend technical standards that enable products made by different manufacturers to interoperate with one another. Many commonplace technologies have been made possible by one or more SSOs at their heart: for example, the IEEE 802.11 standard sets out the technological basis for the "wi-fi" wireless access to the Internet. Likewise, Bluetooth, USB, 5G cellular networks, and "tap" payment technologies all rely on extensive SSO activity. In these and countless other areas of the economy, the presence of a standard permits a large number of companies to manufacture equipment that complies with the standard and thus can interoperate with all other standard-compliant technology.

Standardized technology often implicates patent rights, which are known as "Standard-Essential Patents" ("SEPs") when they cover some aspect of an adopted standard. This is an important consideration in the design of a standard: the existence and nature of IP rights can affect an SSO's choice between alternative technologies. For example, an SSO might prefer to incorporate a technology that can be licensed for free, or for a low royalty, than one that can be used only at great cost. Most market participants would not welcome the prospect of making a significant investment in a standardized technology only to be "held up" after the fact by a patent-holder aiming to extract the benefits of the investment through the threat of an injunction.

SSOs have developed several practices in an attempt to address the threat of patent holdup. First, many SSOs impose disclosure obligations on all participants, requiring that they declare, in advance, any intellectual property that may read on a proposed standard. This addresses the risk that a participant might encourage the SSO to adopt a particular technology and then assert IP rights over it after the standard is finalized and investments have been made. Second, many SSOs require that all participants commit to license any intellectual property implicated by a standard on "fair, reasonable, and nondiscriminatory" ("FRAND") terms. Importantly, each SSO works differently: their respective intellectual property rights ("IPR") policies impose different obligations of disclosure and licensing. And—as you might expect—the meaning of "FRAND" is far from clear in many cases. But courts have held that the FRAND commitment is an enforceable contractual obligation and can be vindicated by an ordinary contract action, on the theory that potential licensees are third-party beneficiaries of the promise made to the SSO.[879]

Activity of this kind—even though it involves competitors collaborating to choose market "standards"—is obviously necessary for the development and maintenance of an open system. As such, courts, Congress, and the agencies have recognized that standard-setting activity is generally procompetitive and should be analyzed under the rule of reason.[880]

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[879] *See*, *e.g.*, Microsoft Corp. v. Motorola, Inc., 696 F.3d 872, 884 (9th Cir. 2012); Broadcom Corp. v. Qualcomm Inc., 501 F.3d 297, 304, 313–14 (3d Cir. 2007); *see also* Cont'l Auto. Sys., Inc. v. Avanci, LLC, 485 F. Supp. 3d 712, 728 (N.D. Tex. 2020), *aff'd sub nom.* Cont'l Auto. Sys., Inc. v. Avanci, L.L.C., No. 20-11032, 2022 WL 2205469 (5th Cir. June 21, 2022).

[880] *See*, *e.g.*, Allied Tube & Conduit Corp. v. Indian Head, Inc., 486 U.S. 492, 501 (1988) ("When . . . private associations promulgate safety standards based on the merits of objective expert judgments and through procedures that prevent the standard-setting process

However, SSOs have always given rise to a healthy docket of antitrust cases. In the remainder of this chapter we will encounter three kinds of antitrust concern: (1) deception of the SSO in order to obtain market or monopoly power (*e.g.*, failing to disclose intellectual property that may read on the standard); (2) violations of FRAND commitments under circumstances where the extraction of supra-FRAND royalties may harm competition; and (3) manipulation of the SSO process as a vehicle for collusion among, or exclusion of, competitors.

1. IP Concealment

A classic form of antitrust misconduct in an SSO involves obtaining monopoly power through deception regarding the existence of IP rights. In the paradigm case, an SSO participant intentionally deceives a standard-setting organization by failing to disclose (or affirmatively denying) its possession of relevant patent rights, only to assert those rights with a flourish after the relevant technology has been incorporated into the standard.[881] This can be a violation of the antitrust laws, in particular where an alternative technology would have been incorporated into the standard but-for the deceptive concealment of IP rights.[882]

The following two extracts demonstrate two variations on this story. In *Rambus*, the FTC challenged Rambus's deception of an SSO. But the Commission's case foundered on the FTC's failure to prove that, if Rambus *had* disclosed its patents, the SSO would have incorporated another technology, rather than just extracting a FRAND commitment from Rambus. In *Unocal*, an oil company had engaged in some misleading conduct regarding a standards-setting process for gasoline to reduce air pollution in California. The two matters proceeded on very different paths: in *Rambus*, the Commission imposed liability but lost on appeal to the D.C. Circuit; in *Unocal*, it obtained full relief as part of a consent decree entered at the time Unocal's merger with Chevron was approved.

Rambus v. FTC

522 F.3d 456 (D.C. Cir. 2008)

Judge Williams.

[1] Rambus Inc. develops computer memory technologies, secures intellectual property rights over them, and then licenses them to manufacturers in exchange for royalty payments. In 1990, Rambus's founders filed a patent application claiming the invention of a faster architecture for dynamic random access memory ("DRAM"). In recent years, Rambus has asserted that patents issued to protect its invention cover four technologies that a private standard-setting organization ("SSO") included in DRAM industry standards.

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from being biased by members with economic interests in stifling product competition, those private standards can have significant procompetitive advantages. It is this potential for procompetitive benefits that has led most lower courts to apply rule-of-reason analysis to product standard-setting by private associations."); Standards Development Organization Act of 2004, codified at 15 U.S.C. § 4301–06 ("In any action under the antitrust laws, or under any State law similar to the antitrust laws, the conduct of- (1) any person in making or performing a contract to carry out a joint venture, or (2) a standards development organization while engaged in a standards development activity, shall not be deemed illegal per se; such conduct shall be judged on the basis of its reasonableness, taking into account all relevant factors affecting competition, including, but not limited to, effects on competition in properly defined, relevant research, development, product, process, and service markets. For the purpose of determining a properly defined, relevant market, worldwide capacity shall be considered to the extent that it may be appropriate in the circumstances."); David A. Balto, *Standard Setting in a Network Economy* (remarks of Feb. 17, 2000).

[881] For a classic example of this in action, *see*, *e.g.*, Complaint, *In the Matter of Dell Computer Corp*, FTC Dkt. No. C-3658 (filed May 20 1996) ¶¶ 7–8 ("After committee approval of the VL-bus design standard, VESA sought the approval of the VL-bus design standard by all of its voting members. On July 20, 1992, Dell voted to approve the preliminary proposal for the VL-bus standard. As part of this approval, a Dell representative certified in writing that, to the best of his knowledge, 'this proposal does not infringe on any trademarks, copyrights, or patents' that Dell possessed. On August 6, 1992, Dell gave final approval to the VL-bus design standard. As part of this final approval, the Dell representative again certified in writing that, to the best of his knowledge, 'this proposal does not infringe on any trademarks, copyrights, or patents' that Dell possessed. After VESA's VL-bus design standard became very successful, having been included in over 1.4 million computers sold in the eight months immediately following its adoption, Dell informed certain VESA members who were manufacturing computers using the new design standard that their 'implementation of the VL-bus is a violation of Dell's exclusive rights.' Dell demanded that these companies meet with its representatives to 'determine the manner in which Dell's exclusive rights will be recognized.' Dell followed up its initial demands by meeting with several companies, and it has never renounced the claimed infringement.").

[882] Broadcom Corp. v. Qualcomm Inc., 501 F.3d 297, 314 (3d Cir. 2007).

[2] Before an SSO adopts a standard, there is often vigorous competition among different technologies for incorporation into that standard. After standardization, however, the dynamic typically shifts, as industry members begin adhering to the standard and the standardized features start to dominate. In this case, 90% of DRAM production is compliant with the standards at issue, and therefore the technologies adopted in those standards—including those over which Rambus claims patent rights—enjoy a similar level of dominance over their alternatives.

[3] After lengthy proceedings, the Federal Trade Commission determined that Rambus, while participating in the standard-setting process, deceptively failed to disclose to the SSO the patent interests it held in four technologies that were standardized. Those interests ranged from issued patents, to pending patent applications, to plans to amend those patent applications to add new claims; Rambus's patent rights in all these interests are said to be sufficiently connected to the invention described in Rambus's original 1990 application that its rights would relate back to its date. Finding this conduct monopolistic and in violation of § 2 of the Sherman Act, 15 U.S.C. § 2, the Commission went on to hold that Rambus had engaged in an unfair method of competition and unfair or deceptive acts or practices prohibited by § 5(a) of the Federal Trade Commission Act ("FTC Act"), id. § 45(a).

[4] Rambus petitions for review. We grant the petition, holding that the Commission failed to sustain its allegation of monopolization. Its factual conclusion was that Rambus's alleged deception enabled it either to acquire a monopoly through the standardization of its patented technologies rather than possible alternatives, or to avoid limits on its patent licensing fees that the SSO would have imposed as part of its normal process of standardizing patented technologies. But the latter—deceit merely enabling a monopolist to charge higher prices than it otherwise could have charged—would not in itself constitute monopolization. . . .

[5] During the early 1990s, the computer hardware industry faced a "memory bottleneck": the development of faster memory lagged behind the development of faster central processing units, and this risked limiting future gains in overall computer performance. To address this problem, Michael Farmwald and Mark Horowitz began collaborating during the late 1980s and invented a higher-performance DRAM architecture. Together, they founded Rambus in March 1990 and filed Patent Application No. 07/510,898 ("the '898 application") on April 18, 1990.

[6] As originally filed, the '898 application included a 62-page written description of Farmwald and Horowitz's invention, 150 claims, and 15 technical drawings. Under the direction of the Patent Office, acting pursuant to 35 U.S.C. § 121, Rambus effectively split the application into several (the original one and 10 "divisionals"). Thereafter, Rambus amended some of these applications and filed additional continuation and divisional applications.

[7] While Rambus was developing a patent portfolio based on its founders' inventions, the computer memory industry was at work standardizing DRAM technologies. The locus of those efforts was the Joint Electron Device Engineering Council ("JEDEC")—then an "activity" of what is now called the Electronics Industries Alliance ("EIA") and, since 2000, a trade association affiliated with EIA and known as the JEDEC Solid State Technology Association. Any company involved in the solid state products industry could join JEDEC by submitting an application and paying annual dues, and members could receive JEDEC mailings, participate in JEDEC committees, and vote on pending matters.

[8] One JEDEC committee, JC 42.3, developed standards for computer memory products. Rambus attended its first JC 42.3 meeting as a guest in December 1991 and began formally participating when it joined JEDEC in February 1992. At the time, JC 42.3 was at work on what became JEDEC's synchronous DRAM ("SDRAM") standard. The committee voted to approve the completed standard in March 1993, and JEDEC's governing body gave its final approval on May 24, 1993. The SDRAM standard includes two of the four technologies over which Rambus asserts patent rights—programmable CAS latency and programmable burst length.

[9] Despite SDRAM's standardization, its manufacture increased very slowly and asynchronous DRAM continued to dominate the computer memory market, so JC 42.3 began to consider a number of possible responses — among them specifications it could include in a next-generation SDRAM standard. As part of that

process, JC 42.3 members received a survey ballot in October 1995 soliciting their opinions on features of an advanced SDRAM — which ultimately emerged as the double data rate ("DDR") SDRAM standard. Among the features voted on were the other two technologies at issue here: on-chip phase lock and delay lock loops ("on-chip PLL/DLL") and dual-edge clocking. The Committee tallied and discussed the survey results at its December 1995 meeting, which was Rambus's last as a JEDEC member. Rambus formally withdrew from JEDEC by letter dated June 17, 1996, saying (among other things) that the terms on which it proposed to license its proprietary technology "may not be consistent with the terms set by standards bodies, including JEDEC."

[10] JC 42.3's work continued after Rambus's departure. In March 1998 the committee adopted the DDR SDRAM standard, and the JEDEC Board of Directors approved it in 1999. This standard retained SDRAM features including programmable CAS latency and programmable burst length, and it added on-chip PLL/DLL and dual-edge clocking; DDR SDRAM, therefore, included all four of the technologies at issue here.

[11] Starting in 1999, Rambus informed major DRAM and chipset manufacturers that it held patent rights over technologies included in JEDEC's SDRAM and DDR SDRAM standards, and that the continued manufacture, sale, or use of products compliant with those standards infringed its rights. It invited the manufacturers to resolve the alleged infringement through licensing negotiations. A number of manufacturers agreed to licenses; others did not, and litigation ensued.

[12] On June 18, 2002, the Federal Trade Commission filed a complaint under § 5(b) of the FTC Act, 15 U.S.C. § 45(b), charging that Rambus engaged in unfair methods of competition and unfair or deceptive acts or practices in violation of the Act. Specifically, the Commission alleged that Rambus breached JEDEC policies requiring it to disclose patent interests related to standardization efforts and that the disclosures it did make were misleading. By this deceptive conduct, it said, Rambus unlawfully monopolized four technology markets in which its patented technologies compete with alternative innovations to address technical issues relating to DRAM design — markets for latency, burst length, data acceleration, and clock synchronization technologies.

[13] Proceedings began before an administrative law judge, who in due course dismissed the Complaint in its entirety. He concluded that Rambus did not impermissibly withhold material information about its intellectual property, and that, in any event, there was insufficient evidence that, if Rambus had disclosed all the information allegedly required of it, JEDEC would have standardized an alternative technology.

[14] Complaint Counsel [*i.e.*, FTC staff] appealed the ALJ's Initial Decision to the Commission, which reopened the record to receive additional evidence and did its own plenary review. On July 31, 2006 the Commission vacated the ALJ's decision and set aside his findings of fact and conclusions of law. The Commission found that while JEDEC's patent disclosure policies were "not a model of clarity," members expected one another to disclose patents and patent applications that were relevant to technologies being considered for standardization, plus (though the Commission was far less clear on these latter items) planned amendments to pending applications or "anything they're working on that they potentially wanted to protect with patents down the road." Based on this interpretation of JEDEC's disclosure requirements, the Commission held that Rambus willfully and intentionally engaged in misrepresentations, omissions, and other practices that misled JEDEC members about intellectual property information "highly material" to the standard-setting process.

[15] The Commission focused entirely on the allegation of monopolization. In particular, the Commission held that the evidence and inferences from Rambus's purpose demonstrated that but for Rambus's deceptive course of conduct, JEDEC either would have excluded Rambus's patented technologies from the JEDEC DRAM standards, or would have demanded RAND assurances [*i.e.*, assurances of reasonable and nondiscriminatory license fees], with an opportunity for ex ante licensing negotiations. Rejecting Rambus's argument that factors other than JEDEC's standards allowed Rambus's technologies to dominate their respective markets, the Commission concluded that Rambus's deception of JEDEC significantly contributed to its acquisition of monopoly power.

[16] After additional briefing by the parties, the Commission rendered a separate remedial opinion and final order. It held that it had the authority in principle to order compulsory licensing, but that remedies beyond injunctions against future anticompetitive conduct would require stronger proof that they were necessary to

restore competitive conditions. Applying that more demanding burden to Complaint Counsel's claims for relief, the Commission refused to compel Rambus to license its relevant patents royalty-free because there was insufficient evidence that absent Rambus's deception JEDEC would have standardized non-proprietary technologies instead of Rambus's; thus, Complaint Counsel had failed to show that such a remedy was necessary to restore competition that would have existed in the but for world. Instead, the Commission decided to compel licensing at reasonable royalty rates, which it calculated based on what it believed would have resulted from negotiations between Rambus and manufacturers before JEDEC committed to the standards. The Commission's order limits Rambus's royalties for three years to 0.25% for JEDEC-compliant SDRAM and 0.5% for JEDEC-compliant DDR SDRAM (with double those royalties for certain JEDEC-compliant, non-DRAM products); after those three years, it forbids any royalty collection.

[17] Rambus moved for reconsideration, and the Commission denied the motion in relevant part on April 27, 2007. Rambus timely petitioned for our review of both the Commission's Final Order and its Denial of Reconsideration, and we consolidated those petitions.

[18] Rambus challenges the Commission's determination that it engaged in unlawful monopolization—and thereby violated § 5 of the FTC Act—on a variety of grounds, of which two are most prominent. First, it argues that the Commission erred in finding that it violated any JEDEC patent disclosure rules and thus that it breached any antitrust duty to provide information to its rivals. Second, it asserts that even if its nondisclosure contravened JEDEC's policies, the Commission found the consequences of such nondisclosure only in the alternative: that it prevented JEDEC either from adopting a non-proprietary standard, or from extracting a RAND commitment from Rambus when standardizing its technology. As the latter would not involve an antitrust violation, says Rambus, there is an insufficient basis for liability.

[19] We find the second of these arguments to be persuasive, and conclude that the Commission failed to demonstrate that Rambus's conduct was exclusionary under settled principles of antitrust law. Given that conclusion, we need not dwell very long on the substantiality of the evidence, which we address only to express our serious concerns about the breadth the Commission ascribed to JEDEC's disclosure policies and their relation to what Rambus did or did not disclose.

[20] In this case under § 5 of the FTC Act, the Commission expressly limited its theory of liability to Rambus's unlawful monopolization of four markets in violation of § 2 of the Sherman Act. Therefore, we apply principles of antitrust law developed under the Sherman Act, and we review the Commission's construction and application of the antitrust laws de novo.

[21] It is settled law that the mere existence of a monopoly does not violate the Sherman Act. In addition to the possession of monopoly power in the relevant market, the offense of monopolization requires the willful acquisition or maintenance of that power as distinguished from growth or development as a consequence of a superior product, business acumen, or historical accident. In this case, Rambus does not dispute the nature of the relevant markets or that its patent rights in the four relevant technologies give it monopoly power in each of those markets. The critical question is whether Rambus engaged in exclusionary conduct, and thereby acquired its monopoly power in the relevant markets unlawfully.

[22] To answer that question, we adhere to two antitrust principles. First, to be condemned as exclusionary, a monopolist's act must have anticompetitive effect. That is, it must harm the competitive process and thereby harm consumers. In contrast, harm to one or more competitors will not suffice. Second, it is the antitrust plaintiff—including the Government as plaintiff—that bears the burden of proving the anticompetitive effect of the monopolist's conduct.

[23] The Commission held that Rambus engaged in exclusionary conduct consisting of misrepresentations, omissions, and other practices that deceived JEDEC about the nature and scope of its patent interests while the organization standardized technologies covered by those interests. Had Rambus fully disclosed its intellectual property, "JEDEC either would have excluded Rambus's patented technologies from the JEDEC DRAM standards, or would have demanded RAND assurances, with an opportunity for ex ante licensing negotiations." But the Commission did not determine that one or the other of these two possible outcomes was the more likely.

The Commission's conclusion that Rambus's conduct was exclusionary depends, therefore, on a syllogism: Rambus avoided one of two outcomes by not disclosing its patent interests; the avoidance of either of those outcomes was anticompetitive; therefore Rambus's non-disclosure was anticompetitive.

[24] We assume without deciding that avoidance of the first of these possible outcomes was indeed anticompetitive; that is, that if Rambus's more complete disclosure would have caused JEDEC to adopt a different (open, non-proprietary) standard, then its failure to disclose harmed competition and would support a monopolization claim. But while we can assume that Rambus's non-disclosure made the adoption of its technologies somewhat more likely than broad disclosure would have, the Commission made clear in its remedial opinion that there was insufficient evidence that JEDEC would have standardized other technologies had it known the full scope of Rambus's intellectual property. Therefore, for the Commission's syllogism to survive—and for the Commission to have carried its burden of proving that Rambus's conduct had an anticompetitive effect—we must also be convinced that if Rambus's conduct merely enabled it to avoid the other possible outcome, namely JEDEC's obtaining assurances from Rambus of RAND licensing terms, such conduct, alone, could be said to harm competition. We are not convinced.

[25] Deceptive conduct—like any other kind—must have an anticompetitive effect in order to form the basis of a monopolization claim. Even an act of pure malice by one business competitor against another does not, without more, state a claim under the federal antitrust laws, without proof of a dangerous probability that the defendant would monopolize a particular market. Even if deception raises the price secured by a seller, but does so without harming competition, it is beyond the antitrust laws' reach. Cases that recognize deception as exclusionary hinge, therefore, on whether the conduct impaired rivals in a manner tending to bring about or protect a defendant's monopoly power. . . . The focus of our antitrust scrutiny, therefore, was properly placed on the resulting harms to competition rather than the deception itself. [. . .]

[26] But an otherwise lawful monopolist's use of deception simply to obtain higher prices normally has no particular tendency to exclude rivals and thus to diminish competition. [. . .]

[27] Here, the Commission expressly left open the likelihood that JEDEC would have standardized Rambus's technologies even if Rambus had disclosed its intellectual property. Under this hypothesis, JEDEC lost only an opportunity to secure a RAND commitment from Rambus. But loss of such a commitment is not a harm to competition from alternative technologies in the relevant markets. Indeed, had JEDEC limited Rambus to reasonable royalties and required it to provide licenses on a nondiscriminatory basis, we would expect less competition from alternative technologies, not more; high prices and constrained output tend to attract competitors, not to repel them.

[28] Scholars in the field have urged that if nondisclosure to an SSO enables a participant to obtain higher royalties than would otherwise have been attainable, the "over-charge can properly constitute competitive harm attributable to the nondisclosure," as the overcharge will distort competition in the downstream market. The contention that price-raising deception has downstream effects is surely correct, but that consequence was equally surely true in [NYNEX Corp. v. Discon, Inc., 525 U.S. 128 (1998)] (though perhaps on a smaller scale) and equally obvious to the Court. The Commission makes the related contention that because the ability to profitably restrict output and set supracompetitive prices is the sine qua non of monopoly power, any conduct that permits a monopolist to avoid constraints on the exercise of that power must be anticompetitive. But again, as in *NYNEX*, an otherwise lawful monopolist's end-run around price constraints, even when deceptive or fraudulent, does not alone present a harm to competition in the monopolized market.

[29] Thus, if JEDEC, in the world that would have existed but for Rambus's deception, would have standardized the very same technologies, Rambus's alleged deception cannot be said to have had an effect on competition in violation of the antitrust laws; JEDEC's loss of an opportunity to seek favorable licensing terms is not as such an antitrust harm. Yet the Commission did not reject this as being a possible—perhaps even the more probable—effect of Rambus's conduct. We hold, therefore, that the Commission failed to demonstrate that Rambus's conduct was exclusionary, and thus to establish its claim that Rambus unlawfully monopolized the relevant markets.

[30] Our conclusion that the Commission failed to demonstrate that Rambus inflicted any harm on competition requires vacatur of the Commission's orders.

Analysis of Proposed Consent Order to Aid Public Comment, In the Matter of Union Oil Company of California,

FTC Dkt. No. 9305 (June 10, 2005)

[1] The Complaint alleges that Respondent Union Oil engaged in a series of acts to subvert state regulatory standard-setting procedures relating to low emissions gasoline. To address California's serious air pollution problems, the California Air Resources Board ("CARB") initiated proceedings in the late 1980s to set regulations and standards governing the composition of low emissions, reformulated gasoline ("RFG"). The Complaint alleges that Union Oil actively participated in CARB RFG rulemaking proceedings and engaged in a pattern of bad-faith, deceptive conduct, exclusionary in nature, that enabled it to undermine competition and harm consumers. The Complaint states that Union Oil also engaged in deceptive and exclusionary conduct through its participation in two private industry groups – the Auto/Oil Air Quality Improvement Program ("Auto/Oil") and the Western States Petroleum Association ("WSPA"). According to the Complaint, Union Oil thereby illegally monopolized, attempted to monopolize, and otherwise engaged in unfair methods of competition in violation of Section 5 of the FTC Act in both the technology market for the production and supply of CARB-compliant "summer-time" gasoline, and the downstream "summer-time" gasoline product market.

[2] Union Oil is a public corporation, organized in, and doing business under, the laws of California. Union Oil is a wholly-owned operating subsidiary of Unocal Corporation, a holding company incorporated in Delaware. Prior to 1997, Union Oil owned and operated refineries in California as a vertically-integrated producer, refiner, and marketer of petroleum products. In 1997, Union Oil sold its west coast refining, marketing, and transportation assets. Currently, Union Oil's primary business activities involve oil and gas exploration and production.

[3] The Complaint alleges that during the CARB "Phase 2" RFG rulemaking proceedings in 1990–1994, Union Oil made a series of materially false and misleading statements. According to the allegations in the Complaint, Union Oil willfully and intentionally:

> a. Represented to CARB and other participants that Union Oil's emissions research results showing, inter alia, the relationships between certain gasoline properties and automobile emissions, were "nonproprietary," in "the public domain," or otherwise were available to CARB, industry members, and the general public – without disclosing that Union Oil intended to assert its proprietary interests (as manifested in pending patent claims) in the results of this research;
>
> b. Represented to CARB that a "predictive model" – i.e., a mathematical model that predicts whether the emissions that would result from varying certain gasoline properties in a fuel are equivalent to the emissions resulting from a specified and fixed fuel formulation – would be "cost-effective" and "flexible," without disclosing that Union Oil's assertion of its proprietary interests would undermine the cost-effectiveness and flexibility of such a model; and
>
> c. Made statements and comments to CARB and other industry participants relating to the cost-effectiveness and flexibility of the regulations that further reinforced the materially false and misleading impression that Union Oil had relinquished or would not enforce any proprietary interests in its emissions research results.

[4] According to the Complaint, Union Oil continued to conceal its intention to obtain a competitive advantage through the enforcement of its proprietary interests relating to RFG even after Union Oil received notice that the pending patent claims were allowed and issued. The Complaint alleges that Union Oil thereby led CARB and two private industry groups—Auto/Oil and WSPA (and their respective industry members)—to believe that Union Oil did not have, or would not enforce, any proprietary interests or intellectual property rights associated with its emissions research results.

[5] The Complaint alleges that Union Oil's conduct caused CARB to adopt Phase 2 "summer-time" RFG regulations that substantially overlapped with Union Oil's concealed pending patent claims. But for Union Oil's deception, according to the Complaint, CARB would not have adopted RFG regulations substantially incorporating Union Oil's proprietary interests; the terms on which Union Oil was later able to enforce its proprietary interests would have been substantially different; or both.

[6] The Complaint alleges that but for Union Oil's deceptive conduct, industry participants in Auto/Oil and WSPA would have taken actions including, but not limited to, (a) advocating that CARB adopt regulations that minimized or avoided infringement of Union Oil's patent claims; (b) advocating that CARB negotiate license terms substantially different from those that Union Oil was later able to obtain; and/or (c) incorporating knowledge of Union Oil's pending patent rights in their capital investment and refinery reconfiguration decisions to avoid and/or minimize potential infringement.

[7] According to the Complaint, Union Oil did not announce the existence of its proprietary interests and patent rights relating to RFG until January 1995—shortly before the relevant CARB Phase 2 RFG regulations were to go into effect. The Complaint alleges that, by that time, the refining industry had spent billions of dollars in capital expenditures to modify their refineries to comply with the CARB Phase 2 RFG regulations, in reliance on Union Oil's representations that its research results were in "the public domain." The Complaint states that once CARB and the refiners had become locked into the Phase 2 regulations, Union Oil commenced vigorous enforcement of its patent rights through litigation and licensing, and obtained four additional patents based on the same RFG research results.

[8] Union Oil's misrepresentations, according to the Complaint, have harmed competition and led directly to the acquisition of monopoly power for the technology to produce and supply California "summer-time" reformulated gasoline (mandated for up to eight months of the year, from approximately March through October). The Complaint alleges that Union Oil's conduct also permitted it to undermine competition and harm consumers in the downstream product market for "summer-time" reformulated gasoline in California. The Complaint alleges that without recourse, Union Oil's conduct would continue materially to cause or threaten to cause further substantial injury to competition and to consumers.

[9] According to the Complaint, Union Oil's enforcement of its RFG patents has resulted, inter alia, in a jury determination of a 5.75 cents per gallon royalty on gasoline produced by major California refiners comprising approximately 90 percent of the current refining capacity of CARB-compliant RFG in the California market. The Complaint alleges that Union Oil also has publicly announced that it will license its RFG patent portfolio, with fees ranging from 1.2 to 3.4 cents per gallon, to "non-litigating" refiners.

[10] The Complaint alleges that Unocal's conduct could result in an estimated annual cost of more than $500 million to the refining industry. According to the Complaint, Union Oil's own economic expert has testified under oath that 90 percent of any royalty would be passed through to consumers in the form of higher gasoline prices. [. . .]

[11] In order to remedy the alleged anticompetitive effects, Union Oil has agreed to take several actions. First, it will cease and desist from any and all efforts, and will not undertake any new efforts to: (a) assert or enforce any of Union Oil's Relevant U.S. Patents against any person; (b) recover any damages or costs for alleged infringements of any of the Relevant U.S. Patents; or (c) collect any fees, royalties or other payments, in cash or in kind, for the practice of any of the Relevant U.S. Patents, including but not limited to fees, royalties, or other payments, in cash or in kind, to be collected pursuant to any License Agreement. . . .

[12] Second, the Proposed Consent Order requires that, within thirty (30) days following the Merger Effective Date, Union Oil shall file, or cause to be filed, with the United States Patent and Trademark Office, the necessary documents pursuant to 35 U.S.C. § 253, 37 C.F.R. § 1.321, and the Manual of Patent Examining Procedure to disclaim or dedicate to the public the remaining term of the Relevant U.S. Patents. The Proposed Consent Order further requires that Union Oil shall correct as necessary, and shall not withdraw or seek to nullify, any disclaimers or dedications filed pursuant to the Proposed Consent Order.

[13] Third, the Proposed Consent Order requires that, within thirty (30) days following the Merger Effective Date, Union Oil shall move to dismiss, with prejudice, all pending legal actions relating to the alleged infringement of any Relevant U.S. Patents, including but not limited to the following actions pending in the United States District Court for the Central District of California: Union Oil Company of California v. Atlantic Richfield Company, et al., Case No. CV-95-2379-CAS and Union Oil Company of California v. Valero Energy Corporation, Case No. CV-02- 00593 SVW.

[14] Paragraph V of the Proposed Consent Order requires Union Oil to distribute a copy of the Proposed Consent Order and the Complaint in this matter to certain interested parties, including (1) any person that Union Oil has contacted regarding possible infringement of any of the Relevant U.S. Patents, (2) any person against which Union Oil is, or was, involved in any legal action regarding possible infringement of any of the Relevant U.S. Patents, (3) any licensee or other Person from which Union Oil has collected any fees, royalties or other payments, in cash or in kind, for the practice of the Relevant U.S. Patents, and (4) any person that Union Oil has contacted with regard to the possible collection of any fees, royalties or other payments, in cash or in kind, for the practice of the Relevant U.S. Patents.

NOTES

1) A recurrent feature in SSO disclosure / deception cases is the lack of clarity in the patent disclosure policies of SSOs. Do you think SSOs tend to hire bad lawyers? Or can you think of other reasons why patent disclosure rules may often be incompletely described?
2) The remedy in *Unocal* (paragraphs 11–14) seems pretty severe, especially compared to the FTC's intended remedy in *Rambus* (paragraph 16). Under what circumstances do you think that a court ought to impose the *Unocal* remedy rather than the (attempted) *Rambus* one as a response to SSO deception?
3) Is it fair to say that the analysis in *Rambus* presumes that the existence (or not) of a FRAND commitment is immaterial to determining whether monopoly power exists? Do you agree with that premise?
4) Was the FTC's case against Unocal stronger or weaker than its case against Rambus? Why do you think Unocal did not litigate?[883]
5) What counts as deception? Is it enough if the patent holder does not affirmatively disclose an IP right but does not affirmatively deny having any such rights: in that case, is the risk appropriately borne by other participants? What if the patent holder innocently fails to spot that its IP reads on a proposed standard? What if the patent disclosure rules of the SSO are at odds with the participants' actual practices and expectations?[884]
6) At the same time the *Rambus* appeal was pending before the D.C. Circuit, the Commission announced it had reached a settlement with Negotiated Data Solutions (N-Data) to resolve charges that N-Data violated Section 5 of the FTC Act by failing to honor a licensing commitment made by its predecessor company.[885] N-Data acquired patents from National Semiconductor that had been incorporated into the IEEE's standard for "autonegotiation"—a process, used on basically every computer sold in the U.S., that allows Ethernet devices made by different manufacturers to work together. National Semiconductor had committed to IEEE that its relevant patents would be licensed at fair, reasonable and non-discriminatory—so-called "FRAND"—royalty rates. According to the FTC's complaint, even though N-Data was aware of National Semiconductor's agreement with the IEEE when N-Data acquired the patents, N-Data refused to honor it. Under the settlement, N-Data agreed not to enforce its patents without first offering to license its technology according to National Semiconductor's initial IEEE commitment. Unlike in *Rambus*, the FTC pursued the N-Data matter exclusively using the broader standards under Section 5 of the FTC Act rather

[883] *See generally* Statement of the Federal Trade Commission, *In the Matter of Union Oil Company of California*, Dkt. No. 9305 and *Chevron/Unocal*, File No. 051-0125 (June 10 ,2005) (announcing a vote to accept "two linked consent agreements that resolve both the Commission's monopolization case against Unocal Corporation's subsidiary Union Oil Company of California and any antitrust concerns arising from Chevron Corporation's pending acquisition of Unocal").

[884] *See* D. Bruce Hoffman & Joseph J. Simons, *Known unknowns: Uncertainty and its implication for antitrust policy and enforcement in the standard-setting context*, 57 Antitrust Bull. 89, 101 (2012) ("Where it can be shown that the SSO's participants, in general, expected one another to behave in a way that, although reasonable, is at odds with the formal, written rules of the organization, the expected rule should govern in place of the written one.").

[885] *See* In re Negotiated Data Solutions LLC, File No. 051 0094 (FTC 2008), www. ftc.gov/os/caselist/0510094/index.shtm.

than invoking the traditional monopolization standards in Section 2 of the Sherman Act. How do you think the allegations against N-Data would have been analyzed under Section 2?

2. Other FRAND Violations

Setting aside cases in which a monopolist gets its IP incorporated into a standard by concealing the existence of intellectual property, some argue that a breach of a FRAND commitment may itself constitute an antitrust problem. To see the core concern, suppose that a monopolist contributes its intellectual property to a standard that it will practice along with its rivals, subject to a FRAND commitment. Then, after the technology is standardized, the monopolist charges an exorbitant royalty, or simply refuses to license, to the surprise and dismay of all.

On the one hand, this sure sounds like the monopolist is engaging in conduct that raises its rivals' costs, violates the FRAND commitment on which the other market participants have relied, and reduces its rivals' ability to compete with its own product monopoly. On the other hand, though, *Rambus v. FTC* (excerpted above) and *NYNEX Corp. v. Discon, Inc.* (which you may remember from Chapter VII), both hold that the evasion of a price cap is not creation of monopoly power for the purposes of antitrust law. And if the monopolist's rivals—who knew perfectly well from the start that a FRAND commitment is an awfully vague thing to trust in—have access to the same remedies in contract to vindicate that FRAND promise, then what's the harm to competition?

Views differ deeply about the merits of theories of competitive harm centering on FRAND violations. The following extracts—two academic and two judicial—give a flavor of some of the debate. In the first two extracts, Makan Delrahim and Herbert Hovenkamp give dueling accounts of the role of antitrust in responding to FRAND violations in the SSO context. In the latter two, the Ninth and Third Circuits adjudicate different claims regarding Qualcomm's participation in various standard-setting organizations: in the FTC case, the Ninth Circuit held that Qualcomm's refusal to grant licenses to rival chip makers—an alleged violation of its FRAND commitments—was not a violation of Section 2. In the case brought by Broadcom regarding separate conduct, the Third Circuit refused to dismiss the claim under Rule 12, explicitly holding that the breach of a "false promise" to license on FRAND terms could constitute unlawful monopolization.

Makan Delrahim, Take It to the Limit: Respecting Innovation Incentives in the Application of Antitrust Law

Remarks of Nov. 10, 2017

Antitrust Law Should Not Police FRAND Commitments to SSOs

. . . I respectfully submit that enforcers and courts should be mindful of the proper application of antitrust law to standard setting. There is a growing trend supporting what I would view as a misuse of antitrust or competition law, purportedly motivated by the fear of so-called patent hold-up, to police private commitments that IP holders make in order to be considered for inclusion in a standard. This trend is troublesome. If a patent holder violates its commitments to an SSO, the first and best line of defense, I submit, is the SSO itself and its participants.

These commitments are typically contractual in nature. More specifically, SSOs often impose obligations on IP holders seeking to have their technology evaluated and, if selected, incorporated into a standard to engage in fair, reasonable, and nondiscriminatory licensing of their technology—what we call "FRAND" or "RAND" commitments. Disputes inevitably arise regarding what licensing fees or practices are "reasonable," and "nondiscriminatory," as you would expect with free-market negotiations. We should be most concerned, however, when this dispute involves concerted action, on either side—the implementers or the innovators.

If a patent holder is alleged to have violated a commitment to a standard setting organization, that action may have some impact on competition. But, I respectfully submit, that does not mean the heavy hand of antitrust necessarily is the appropriate remedy for the would-be licensee—or the enforcement agency. There are perfectly adequate and more appropriate common law and statutory remedies available to the SSO or its members. [. . .]

Under the existing statutory scheme, it is not the duty or the proper role of antitrust law to referee what unilateral behavior is reasonable for patent holders in this context. Patent holders make decisions every day about how to exploit their property rights, knowing that the consequence of those actions may be to subject themselves to contractual or other common law liability. The blunt application of antitrust law to such unilateral conduct throws those decisions into disarray, threatening to punish IP holders with onerous penalties that can deter other innovators from taking the necessary R&D investment risk to develop the next great technological leap forward.

More importantly, refraining from imposing antitrust penalties gives teeth to more appropriate common law remedies and allows SSOs to live up to their promise. In a breach of contract action, a party can litigate the facts regarding what constitutes a "reasonable" or "nondiscriminatory" rate or commitment. If there is a violation of a reasonableness standard, the factfinder can decide it, like they do in other instances of contract violations. Antitrust enforcers should exercise greater humility and enforce the antitrust laws in a manner that best promotes dynamic competition for the benefit of consumers.

Herbert Hovenkamp, FRAND and Antitrust

105 Cornell L. Rev. 1683 (2020)

Although the fact that a patent is FRAND-encumbered does not determine antitrust liability in either direction, it is hardly irrelevant. On the market power question, the fact that a patent has been declared standard essential and subjected to FRAND requirements is certainly important. Depending on the degree of path dependence, a patent may have become essential to practicing a particular standard, or implementers may have invested substantial sunk costs into the technology it covers. In that case, extraction may be more costly than simply paying more, or else the firm may exit from the market. These are all fact questions, but they can weigh heavily in a determination of market power.

We suggest that FRAND status creates a presumption of sufficient market power, which can be defeated by a showing that firms operating under the SSO can find a suitable substitute for the FRAND-encumbered patent in question, readily and at low cost. For example, the presumption would likely be defeated by a finding that firms operating under the standard are not infringers, which is simply another way of saying that the patent has been mis-declared as standard essential. [. . .]

[W]hile violation of a FRAND commitment on a SEP is not necessarily an antitrust violation, two important antitrust requirements, power and anticompetitive effects, can be heavily affected by SEP status. Conditionally refusing to license a FRAND-encumbered patent when the relevant agreement requires licensing is clearly a breach of contract, but it can also be an antitrust violation when these conditions are met.

Conditional dealing is unlawful under the antitrust laws only when both power and anticompetitive effects are shown. Conventionally, the relevant anticompetitive effects are market foreclosure or raising rivals' costs. Here, the primary question is whether the condition made it more costly or impossible for a participating firm to operate on the network. Under the restraint of trade standard of section 1 of the Sherman Act, antitrust harm also includes reduced output and higher prices in output markets. Depending on the facts, the victims could be either excluded rivals; those whose costs have been increased; or else downstream firms, including consumers, forced to pay higher prices.

* * *

One aspect of the *Qualcomm* litigation concerned an allegation that Qualcomm had engaged in a non-deceptive FRAND violation. The FTC argued that Qualcomm's FRAND commitments to various SSOs—governing SEPs practiced by other chip makers and device makers alike—required that Qualcomm grant licenses to other chip-makers, rather than only to device manufacturers (original equipment manufacturers, or "OEMs"), and that its failure to license other chip-makers was anticompetitive. Qualcomm denied any such duty, pointed out that it had committed not to sue any other chip-makers, and it preferred to license only at the device level of the supply chain. The Ninth Circuit agreed with Qualcomm, distinguishing the Third Circuit's earlier decision in *Broadcom v. Qualcomm*. Take look at both opinions.

FTC v. Qualcomm Inc.

969 F.3d 974 (9th Cir. 2020)

Judge Callahan.

[1] Qualcomm's competitors in the modem chip markets contend that Qualcomm's business practices, in particular its refusal to license them, have hampered or slowed their ability to develop and retain OEM customer bases, limited their growth, delayed or prevented their entry into the market, and in some cases forced them out of the market entirely. These competitors contend that this result is not just anticompetitive, but a violation of Qualcomm's contractual commitments to two cellular SSOs—the Telecommunications Industry Association ("TIA") and Alliance for Telecommunications Industry Solutions ("ATIS")—to license its SEPs "to all applicants" on FRAND terms. Qualcomm argues that it has no antitrust duty to deal with its rivals, and in any case OEM-level licensing is consistent with Qualcomm's SSO commitments because only OEM products (i.e., cellphones, tablets, etc.) "practice" or "implement" the standards embodied in Qualcomm's SEPs. Furthermore, Qualcomm argues that it substantially complies with the TIA and ATIS requirements by not asserting its patents against rival chipmakers. [. . .]

[2] [T]he FTC contends that this court may . . . hold that Qualcomm engaged in anticompetitive conduct in violation of § 2. This is so, the FTC urges, because (1) Qualcomm entered into a voluntary contractual commitment to deal with its rivals as part of the SSO process, which is itself a derogation from normal market competition, and (2) Qualcomm's breach of this contractual commitment satisfies traditional Section 2 standards in that it tends to impair the opportunities of rivals and does not further competition on the merits. We disagree.

[3] Even if the district court is correct that Qualcomm is contractually obligated via its SSO commitments to license rival chip suppliers—a conclusion we need not and do not reach—the FTC still does not satisfactorily explain how Qualcomm's alleged breach of this contractual commitment itself impairs the opportunities of rivals. It argues the breach facilitates Qualcomm's collection of a surcharge from rivals' customers. But this refers to a distinct business practice, licensing royalties, and alleged harm to OEMs, not rival chipmakers. In any case, Qualcomm's royalties are "chip-supplier neutral" because Qualcomm collects them from all OEMs that license its patents, not just "rivals' customers." The FTC argues that Qualcomm's breach directly impacts rivals by otherwise deterring their entry and investment. But this ignores that [Qualcomm allows competing chip makers] to practice Qualcomm's SEPs (royalty-free) before selling their chips to downstream OEMs. Furthermore, in order to make out a § 2 violation, the anticompetitive harm identified must be to competition itself, not merely to competitors. The FTC identifies no such harm to competition.

[4] The FTC's conclusion that OEM-level licensing does not further competition on the merits is not only belied by MediaTek and Intel's entries into the modem chip markets in the 2015–2016 timeframe, it also gives inadequate weight to Qualcomm's reasonable, procompetitive justification that licensing at the OEM and chip-supplier levels simultaneously would require the company to engage in "multi-level licensing," leading to inefficiencies and less profit. Qualcomm's procompetitive justification is supported by at least two other companies—Nokia and Dolby—with similar SEP portfolios to Qualcomm's. More critically, this part of the FTC's argument skips ahead to an examination of Qualcomm's procompetitive justifications, failing to recognize that the burden does not shift to Qualcomm to provide such justifications unless and until the FTC meets its initial burden of proving anticompetitive harm. Because the FTC has not met its initial burden under the rule of reason framework, we are less critical of Qualcomm's procompetitive justifications for its OEM-level licensing policy—which, in any case, appear to be reasonable and consistent with current industry practice.

[5] The FTC points to one case, *Broadcom Corp. v. Qualcomm Inc.*, 501 F.3d 297 (3rd Cir. 2007), as support for its argument that a company's breach of its SSO commitments may rise to the level of an antitrust violation. But in that earlier antitrust action against Qualcomm, the alleged anticompetitive conduct was not Qualcomm's practice of licensing at the OEM level while not enforcing its patents against rival chip suppliers; instead, Broadcom asserted that Qualcomm intentionally deceived SSOs by inducing them to standardize one of its patented technologies, which it then licensed at "discriminatorily higher" royalty rates to competitors and customers using non-Qualcomm chipsets. The Broadcom court held that Qualcomm's intentionally false

promise to license [its SEP] on FRAND terms coupled with an SDO's reliance on that promise and Qualcomm's subsequent discriminatory pricing sufficiently alleged actionable anticompetitive conduct under § 2 to overcome Qualcomm's motion to dismiss.

[6] Here, the district court found neither intentional deception of SSOs on the part of Qualcomm nor that Qualcomm charged discriminatorily higher royalty rates to competitors and OEM customers using non-Qualcomm chips. Instead, it is undisputed that Qualcomm's current royalty rates—which the district court found "unreasonably high" . . . —are based on the patent portfolio chosen by the OEM customer regardless of where the OEM sources its chips. Furthermore, competing chip suppliers are permitted to practice Qualcomm's SEPs freely without paying any royalties at all. Thus, the Third Circuit's "intentional deception" exception to the general rule that breaches of SSO commitments do not give rise to antitrust liability does not apply to this case.

[7] Finally, we note the persuasive policy arguments of several academics and practitioners with significant experience in SSOs, FRAND, and antitrust enforcement, who have expressed caution about using the antitrust laws to remedy what are essentially contractual disputes between private parties engaged in the pursuit of technological innovation. The Honorable Paul R. Michel, retired Chief Judge of the Court of Appeals for the Federal Circuit, argues that it would be a mistake to use the hammer of antitrust law to resolve FRAND disputes when more precise scalpels of contract and patent law are effective. Judge Michel notes that while antitrust policy has its place as a policy lever to enhance market competition, the rules of contract and patent law are better equipped to handle commercial disputes between the world's most sophisticated companies about FRAND agreements. Echoing this sentiment, a former FTC Commissioner, Joshua Wright, argues that the antitrust laws are not well suited to govern contract disputes between private parties in light of remedies available under contract or patent law, and that imposing antitrust remedies in pure contract disputes can have harmful effects in terms of dampening incentives to participate in standard-setting bodies and to commercialize innovation.

[8] In short, we are not persuaded by the FTC's argument that we should adopt an additional exception, beyond the *Aspen Skiing* exception that the FTC concedes does not apply here, to the general rule that businesses are free to choose the parties with whom they will deal, as well as the prices, terms, and conditions of that dealing. We therefore decline to hold that Qualcomm's alleged breach of its SSO commitments to license its SEPs on FRAND terms, even assuming there was a breach, amounted to anticompetitive conduct in violation of § 2. [. . .]

[9] [A further] problem with the district court's "unreasonable royalty rate" conclusion is that it erroneously assumes that royalties are "anticompetitive"—in the antitrust sense—unless they precisely reflect a patent's current, intrinsic value and are in line with the rates other companies charge for their own patent portfolios. Neither the district court nor the FTC provides any case law to support this proposition, which sounds in patent law, not antitrust law. See 35 U.S.C. § 284 (entitling a patent owner to "damages adequate to compensate for the infringement, but in no event less than a *reasonable royalty* for the use made of the invention by the infringer" (emphasis added)). We decline to adopt a theory of antitrust liability that would presume anticompetitive conduct any time a company could not prove that the "fair value" of its SEP portfolios corresponds to the prices the market appears willing to pay for those SEPs in the form of licensing royalty rates.

Broadcom Corp. v. Qualcomm Inc.

501 F.3d 297 (3d Cir. 2007)

Judge Barry.

[1] [Broadcom's] Complaint alleged that Qualcomm induced the [European Telecommunications Standards Institute ("ETSI")] and other SDOs to include its proprietary technology in the UMTS standard by falsely agreeing to abide by the SDOs' policies on [intellectual property rights ("IPRs")], but then breached those agreements by licensing its technology on non-FRAND terms. The intentional acquisition of monopoly power through deception of an SDO, Broadcom posits, violates antitrust law.

[2] The Complaint also alleged that Qualcomm ignored its FRAND commitment to the ETSI and other SDOs by demanding discriminatorily higher (i.e., non-FRAND) royalties from competitors and customers using chipsets not manufactured by Qualcomm. Qualcomm, the Complaint continued, has a 90% share in the market for CDMA-path chipsets, and by withholding favorable pricing in that market, coerced cellular telephone manufacturers to purchase only Qualcomm-manufactured UMTS-path chipsets. These actions are alleged to be part of Qualcomm's effort to obtain a monopoly in the UMTS chipset market because it views competition in that market as a long-term threat to its existing monopolies in CDMA technology. [. . .]

[3] . . . [W]e must determine whether Broadcom has stated actionable anticompetitive conduct with allegations that Qualcomm deceived relevant SDOs into adopting the UMTS standard by committing to license [certain relevant] technology on FRAND terms and, later, after lock-in occurred, demanding non-FRAND royalties. As Qualcomm is at pains to point out, no court nor agency has decided this precise question and, in that sense, our decision will break new ground. The authorities we have cited in our lengthy discussion that has preceded this point, however, decidedly favor a finding that Broadcom's allegations, if accepted as true, describe actionable anticompetitive conduct.

[4] To guard against anticompetitive patent hold-up, most SDOs require firms supplying essential technologies for inclusion in a prospective standard to commit to licensing their technologies on FRAND terms. (E.g., IEEE Br. 9 & n. 13 (stating that under IEEE bylaws, the absence of irrevocable FRAND assurances will preclude approval of standards known to incorporate essential, proprietary technologies).) A firm's FRAND commitment, therefore, is a factor—and an important factor—that the SDO will consider in evaluating the suitability of a given proprietary technology vis-a-vis competing technologies.

[5] The FRAND commitment, or lack thereof, is, moreover, a key indicator of the cost of implementing a potential technology. During the critical competitive period that precedes adoption of a standard, technologies compete in discrete areas, such as cost and performance characteristics. Misrepresentations concerning the cost of implementing a given technology may confer an unfair advantage and bias the competitive process in favor of that technology's inclusion in the standard.

[6] A standard, by definition, eliminates alternative technologies. When a patented technology is incorporated in a standard, adoption of the standard eliminates alternatives to the patented technology. Although a patent confers a lawful monopoly over the claimed invention, its value is limited when alternative technologies exist. That value becomes significantly enhanced, however, after the patent is incorporated in a standard. Firms may become locked in to a standard requiring the use of a competitor's patented technology. The patent holder's IPRs, if unconstrained, may permit it to demand supracompetitive royalties. It is in such circumstances that measures such as FRAND commitments become important safeguards against monopoly power.

[7] We hold that (1) in a consensus-oriented private standard-setting environment, (2) a patent holder's intentionally false promise to license essential proprietary technology on FRAND terms, (3) coupled with an SDO's reliance on that promise when including the technology in a standard, and (4) the patent holder's subsequent breach of that promise, is actionable anticompetitive conduct. This holding follows directly from established principles of antitrust law and represents the emerging view of enforcement authorities and commentators, alike. Deception in a consensus-driven private standard-setting environment harms the competitive process by obscuring the costs of including proprietary technology in a standard and increasing the likelihood that patent rights will confer monopoly power on the patent holder. Deceptive FRAND commitments, no less than deceptive nondisclosure of IPRs, may result in such harm.

[8] . . . Having now held that a firm's deceptive FRAND commitment to an SDO may constitute actionable anticompetitive conduct, we conclude quickly and easily that Claim 1 states a claim for monopolization under § 2 of the Sherman Act. [. . .]

[9] [T]he Complaint . . adequately alleged that Qualcomm obtained and maintained its market power willfully, and not as a consequence of a superior product, business acumen, or historic accident. Qualcomm excluded competition and refused to compete on the merits. As discussed above, the alleged anticompetitive conduct was the intentional false promise that Qualcomm would license its [relevant] technology on FRAND terms, on

which promise the relevant SDOs relied in choosing the [relevant] technology for inclusion in the UMTS standard, followed by Qualcomm's insistence on non-FRAND licensing terms. Qualcomm's deceptive conduct induced relevant SDOs to incorporate a technology into the UMTS standard that they would not have considered absent a FRAND commitment. Although the Complaint did not specifically allege that Qualcomm made its false statements in a consensus-oriented environment . . . this omission is not fatal in light of allegations that FRAND assurances were required, as well as allegations concerning the SDOs' reliance on Qualcomm's assurances. Together, these allegations satisfy the second element of a § 2 claim. [. . .]

[10] A firm is generally under no obligation to cooperate with its rivals. . . . Here . . . Qualcomm is alleged to have actively marketed its . . . technology for inclusion in an industry-wide standard, and to have voluntarily agreed to license that technology on FRAND terms. We note, albeit in passing, that the Court in [*Trinko*] pointed as well to the extensive regulatory framework that created oversight functions and remedies that the antitrust laws were unsuited to augment. No such regulatory framework exists here.

NOTES

1) When, if ever, should antitrust liability result from the violation of a FRAND commitment?
2) Should the antitrust analysis of FRAND violations ever distinguish based on whether the promise, or the subsequent conduct, was in "good faith"? What would "good faith" mean for this purpose?
3) When should conduct that would otherwise be an antitrust violation be treated differently because of the availability of another cause of action (*e.g.*, contract or tort)? When might the entities with those remedies and the entities who are injured be different?
4) Many innovators have vast patent portfolios with many thousands of patents. How could, or should, a court determine the FRAND value of such a portfolio?

3. SSO Manipulation

Finally, some SSO activities may raise antitrust concerns based on alleged capture or manipulation of the process. Courts, including the Supreme Court, have been willing to impose antitrust liability when such conduct has turned the SSO into a vehicle for collusion or exclusion. However, because *all* SSO activity involves competitor collaboration, and involves the selection of some technologies at the expense of others, it can be challenging to be sure that concerns about collusion and exclusion are well founded.

A trio of famous Supreme Court cases—*Radiant Burners*, *Hydrolevel*, *and Allied Tube*—frame the landscape for antitrust claims alleging SSO manipulation. We will meet them in turn. In *Radiant Burners*, the plaintiff alleged that the SSO was going beyond establishing voluntary standards and was engaging in an unwarranted group boycott—a coordinated refusal to deal—that foreclosed the plaintiff's access to customers. In *Hydrolevel*, the plaintiff alleged that the defendant SSO had been effectively commandeered by a competitor in order to declare the plaintiff's product baselessly unsafe. And in *Allied Tube* the plaintiff alleged that the SSO process had been "stacked" in order to elicit an anticompetitive outcome.

Radiant Burners, Inc. v. Peoples Gas Light & Coke Co.

364 U.S. 656 (1961)

Per curiam.

[1] The question here is whether petitioner's complaint stated a claim upon which relief could be granted. Petitioner is engaged at Lombard, Illinois, in the manufacture and sale in interstate commerce of a ceramic gas burner, known as the "Radiant Burner," for the heating of houses and other buildings. Claiming that American Gas Association, Inc. (AGA), a membership corporation doing business in the Northern District of Illinois and in other States, and 10 of its numerous members[1] who also are doing business in the Northern District of Illinois,

[1] Of the 10 members of AGA who were joined with it as defendants, two are public utilities engaged in the distribution of gas in the Northern District of Illinois, namely, The Peoples Gas Light & Coke Company and Northern Illinois Gas Company; two are pipeline companies engaged in transporting natural gas in interstate commerce into the Northern District of Illinois, namely,

combined and conspired to restrain interstate commerce in the manufacture, sale and use of gas burners in violation of s 1 of the Sherman Act, petitioner brought this action against those parties for treble damages and an injunction in the United States District Court for the Northern District of Illinois.

[2] The complaint included the following allegations: American Gas Association operates testing laboratories wherein it purports to determine the safety, utility and durability of gas burners. It has adopted a seal of approval which it affixes on such gas burners as it determines have passed its tests. Its tests are not based on objective standards, but are influenced by respondents, some of whom are in competition with petitioner, and thus its determinations can be made arbitrarily and capriciously. Petitioner has twice submitted its Radiant Burner to AGA for approval but it has not been approved, although it is safer and more efficient than, and just as durable as, gas burners which AGA has approved. Because AGA and its . . . members, . . . effectuate the plan and purpose of the unlawful combination and conspiracy alleged herein by refusing to provide gas for use in the plaintiff's Radiant Burner(s) which are not approved by AGA, petitioner's gas burners have been effectively excluded from the market, as its potential customers will not buy gas burners for which they cannot obtain gas, and in consequence petitioner has suffered and is suffering the loss of substantial profits.

[3] Respondents moved to dismiss for failure of the complaint to state a claim upon which relief could be granted. . . .

[4] We think the decision of the Court of Appeals does not accord with our recent decision in Klor's, Inc. v. Broadway-Hale Stores, 359 U.S. 207 [(1959) (condemning as *per se* illegal a purported group boycott) {*Eds.: see supra § V.B.3.*}]. The allegation in the complaint that AGA and its Utility members, including Peoples and Northern, effectuate the plan and purpose of the unlawful combination and conspiracy by refusing to provide gas for use in the plaintiff's Radiant Burners because they are not approved by AGA clearly shows one type of trade restraint and public harm the Sherman Act forbids. It is obvious that petitioner cannot sell its gas burners, whatever may be their virtues, if, because of the alleged conspiracy, the purchasers cannot buy gas for use in those burners. The conspiratorial refusal to provide gas for use in the plaintiff's Radiant Burners because they are not approved by AGA therefore falls within one of the classes of restraints which from their nature or character are unduly restrictive, and hence forbidden by both the common law and the statute.

CASENOTE: American Society of Mechanical Engineers, Inc. v. Hydrolevel Corp.

456 U.S. 556 (1982)

Hydrolevel presents a striking example of SSO misuse. In that case, McDonnell & Miller, Inc. ("M&M"), had long dominated the market for a certain type of boiler component: "low-water fuel cutoffs," which switched off a boiler when the water level dropped too low. But after decades of incumbency, a new entrant, Hydrolevel, appeared with an improved fuel cutoff: one which, unlike M&M's product, included a novel time-delay function which prevented the cutoff from firing prematurely. In 1971, Hydrolevel won a key customer away from M&M.

M&M decided to respond to this competitive threat: not in the marketplace, but through its own deep involvement in the American Society of Mechanical Engineers ("ASME"). ASME was a nonprofit trade society of the mechanical engineering profession, with more than 90,000 members, responsible for promulgating more than 400 codes and standards that were frequently incorporated by reference into the laws of many states and the ordinances of major cities. One of ASME's codes was the Boiler and Pressure Vessel Code, which had been adopted as law by no fewer than 46 states. An M&M employee, John James, was vice-chair of the subcommittee responsible for drafting those portions of the code relating to low-water fuel cutoffs. In another cozy detail, the chair of the subcommittee, T.R. Hardin, worked for a firm controlled by IT&T, which was soon to acquire M&M.

Natural Gas Pipeline of America and Texas-Illinois Natural Gas Co.; the other six are manufacturers of gas burners, namely, Autogas Company, Crown Stove Works, Florence Stove Company, Gas Appliance Service, Inc., Norge Sales Corporation, and Sellers Engineering Company.

James and other M&M employees met with Hardin and cooked up a plan. M&M would send a letter to ASME asking whether a fuel cutoff that used a time delay was compliant with ASME's code. In the ordinary course, this letter would be referred to Hardin to draft a response, which could be sent as unofficial correspondence to avoid any need to refer it to the broader subcommittee. The reply drafted by Hardin, of course, would interpret the Code to prohibit the use of time delays—and that letter, in turn, could be used to deter M&M's customers from dealing with Hydrolevel.

The plan worked as intended. Hydrolevel was forced to sell its assets for liquidation value—but not before filing suit under Sections 1 and 2 against the successor to M&M and ASME itself.

Justice Blackmun's opinion for the Court emphasized that "a standard-setting organization like ASME can be rife with opportunities for anticompetitive activity. . . Although, undoubtedly, most [members] serve ASME without concern for the interests of their corporate employers, some may well view their positions with ASME, at least in part, as an opportunity to benefit their employers." And the "great influence of ASME's reputation" created an opportunity for anticompetitive manipulation. Here, M&M had inappropriately "use[d] ASME's reputation to hinder Hydrolevel's competitive threat."

Liability was appropriate not just for the successor to M&M, but also for ASME itself, as long as ASME's agents had acted with the apparent authority (*i.e.*, the reasonable appearance of agency authority) of ASME itself. The Court underscored the importance of the resulting incentives: if ASME was made to answer for the conduct of agents with apparent authority, "it is much more likely that similar antitrust violations will not occur in the future. Pressure will be brought on the organization to see to it that its agents abide by the law. Only ASME can take systematic steps to make improper conduct on the part of all its agents unlikely, and the possibility of civil liability will inevitably be a powerful incentive for ASME to take those steps. Thus, a rule that imposes liability on the standard-setting organization—which is best situated to prevent antitrust violations through the abuse of its reputation—is most faithful to the congressional intent that the private right of action deter antitrust violations."

With the great power of a standard-setting organization came great responsibility. "When ASME's agents act in its name, they are able to affect the lives of large numbers of people and the competitive fortunes of businesses throughout the country. By holding ASME liable under the antitrust laws for the antitrust violations of its agents committed with apparent authority, we recognize the important role of ASME and its agents in the economy, and we help to ensure that standard-setting organizations will act with care when they permit their agents to speak for them. We thus make it less likely that competitive challengers like Hydrolevel will be hindered by agents of organizations like ASME in the future."

Allied Tube & Conduit Corp. v. Indian Head, Inc.

486 U.S. 492 (1988)

Justice Brennan.

[1] The National Fire Protection Association (Association) is a private, voluntary organization with more than 31,500 individual and group members representing industry, labor, academia, insurers, organized medicine, firefighters, and government. The Association, among other things, publishes product standards and codes related to fire protection through a process known as "consensus standard making." One of the codes it publishes is the National Electrical Code (Code), which establishes product and performance requirements for the design and installation of electrical wiring systems. Revised every three years, the Code is the most influential electrical code in the nation. A substantial number of state and local governments routinely adopt the Code into law with little or no change; private certification laboratories, such as Underwriters Laboratories, normally will not list and label an electrical product that does not meet Code standards; many underwriters will refuse to insure structures that are not built in conformity with the Code; and many electrical inspectors, contractors, and distributors will not use a product that falls outside the Code.

[2] Among the electrical products covered by the Code is electrical conduit, the hollow tubing used as a raceway to carry electrical wires through the walls and floors of buildings. Throughout the relevant period, the Code

permitted using electrical conduit made of steel, and almost all conduit sold was in fact steel conduit. Starting in 1980, respondent began to offer plastic conduit made of polyvinyl chloride. Respondent claims its plastic conduit offers significant competitive advantages over steel conduit, including pliability, lower installed cost, and lower susceptibility to short circuiting. In 1980, however, there was also a scientific basis for concern that, during fires in high-rise buildings, polyvinyl chloride conduit might burn and emit toxic fumes.

[3] Respondent initiated a proposal to include polyvinyl chloride conduit as an approved type of electrical conduit in the 1981 edition of the Code. Following approval by one of the Association's professional panels, this proposal was scheduled for consideration at the 1980 annual meeting, where it could be adopted or rejected by a simple majority of the members present. Alarmed that, if approved, respondent's product might pose a competitive threat to steel conduit, petitioner, the Nation's largest producer of steel conduit, met to plan strategy with, among others, members of the steel industry, other steel conduit manufacturers, and its independent sales agents. They collectively agreed to exclude respondent's product from the 1981 Code by packing the upcoming annual meeting with new Association members whose only function would be to vote against the polyvinyl chloride proposal.

[4] Combined, the steel interests recruited 230 persons to join the Association and to attend the annual meeting to vote against the proposal. Petitioner alone recruited 155 persons—including employees, executives, sales agents, the agents' employees, employees from two divisions that did not sell electrical products, and the wife of a national sales director. Petitioner and the other steel interests also paid over $100,000 for the membership, registration, and attendance expenses of these voters. At the annual meeting, the steel group voters were instructed where to sit and how and when to vote by group leaders who used walkie-talkies and hand signals to facilitate communication. Few of the steel group voters had any of the technical documentation necessary to follow the meeting. None of them spoke at the meeting to give their reasons for opposing the proposal to approve polyvinyl chloride conduit. Nonetheless, with their solid vote in opposition, the proposal was rejected and returned to committee by a vote of 394 to 390. Respondent appealed the membership's vote to the Association's Board of Directors, but the Board denied the appeal on the ground that, although the Association's rules had been circumvented, they had not been violated.

[5] In October 1981, respondent brought this suit in Federal District Court, alleging that petitioner and others had unreasonably restrained trade in the electrical conduit market in violation of § 1 of the Sherman Act. [. . .]

[6] In this case, the restraint of trade on which liability was predicated was the Association's exclusion of respondent's product from the Code, and no damages were imposed for the incorporation of that Code by any government. The relevant context is thus the standard-setting process of a private association. Typically, private standard-setting associations, like the Association in this case, include members having horizontal and vertical business relations. There is no doubt that the members of such associations often have economic incentives to restrain competition and that the product standards set by such associations have a serious potential for anticompetitive harm. Agreement on a product standard is, after all, implicitly an agreement not to manufacture, distribute, or purchase certain types of products. Accordingly, private standard-setting associations have traditionally been objects of antitrust scrutiny. When, however, private associations promulgate safety standards based on the merits of objective expert judgments and through procedures that prevent the standard-setting process from being biased by members with economic interests in stifling product competition, those private standards can have significant procompetitive advantages. It is this potential for procompetitive benefits that has led most lower courts to apply rule-of-reason analysis to product standard-setting by private associations. [. . .]

[7] Although we do not here set forth the rules of antitrust liability governing the private standard-setting process, we hold that at least where, as here, an economically interested party exercises decision-making authority in formulating a product standard for a private association that comprises market participants, that party enjoys no *Noerr* immunity [*i.e.*, immunity for conduct that amounts to petitioning the government] from any antitrust liability flowing from the effect the standard has of its own force in the marketplace.

[8] This conclusion does not deprive state and local governments of input and information from interested individuals or organizations or leave petitioner without ample means to petition those governments. Petitioner,

and others concerned about the safety or competitive threat of polyvinyl chloride conduit, can, with full antitrust immunity, engage in concerted efforts to influence those governments through direct lobbying, publicity campaigns, and other traditional avenues of political expression. To the extent state and local governments are more difficult to persuade through these other avenues, that no doubt reflects their preference for and confidence in the nonpartisan consensus process that petitioner has undermined. Petitioner remains free to take advantage of the forum provided by the standard-setting process by presenting and vigorously arguing accurate scientific evidence before a nonpartisan private standard-setting body. And petitioner can avoid the strictures of the private standard-setting process by attempting to influence legislatures through other forums. What petitioner may not do (without exposing itself to possible antitrust liability for direct injuries) is bias the process by, as in this case, stacking the private standard-setting body with decisionmakers sharing their economic interest in restraining competition.

Justice White, with whom Justice O'Connor joins, dissenting.

[9] [. . .] The Court's decision is unfortunate . . . . There are now over 400 private organizations preparing and publishing an enormous variety of codes and standards. State and local governments necessarily, and as a matter of course, turn to these proposed codes in the process of legislating to further the health and safety of their citizens. The code that is at issue in this case, for example, was adopted verbatim by 25 States and the District of Columbia; 19 others adopted it with only minor changes. It is the most widely disseminated and adopted model code in the world today. There is no doubt that the work of these private organizations contributes enormously to the public interest and that participation in their work by those who have the technical competence and experience to do so should not be discouraged.

[10] The Court's decision today will surely do just that. It must inevitably be the case that codes such as the NEC will set standards that some products cannot satisfy and hence in the name of health and safety will reduce or prevent competition, as was the case here. Yet, putative competitors of the producer of such products will now think twice before urging in the course of the code-making process that those products not be approved; for if they are successful (or even if they are not), they may well become antitrust defendants facing treble-damages liability unless they can prove to a court and a jury that they had no evil motives but were merely presenting and vigorously arguing accurate scientific evidence before a nonpartisan private standard-setting body. In this case, for example, even if Allied had not resorted to the tactics it employed, but had done no more than successfully argue in good faith the hazards of using respondent's products, it would have inflicted the same damage on respondent and would have risked facing the same antitrust suit, with a jury ultimately deciding the health and safety implications of the products at issue.

[11] The Court's suggestion that its decision will not affect the ability of these organizations to assist state and local governments is surely wrong. The Court's holding is that at least where, as here, an economically interested party exercises decisionmaking authority in formulating a product standard for a private association that comprises market participants, that party enjoys no *Noerr* immunity from any antitrust liability flowing from the effects the standard has of its own force in the marketplace. This description encompasses the structure and work of all such organizations as we now know them. The Court is saying, in effect, that where a private organization sets standards, the participants can be sued under the antitrust laws for any effects those standards have in the marketplace other than those flowing from their adoption into law. But the standards will have some effect in the marketplace even where they are also adopted into law, through publicity and other means, thus exposing the participants to liability. Henceforth, therefore, any private organization offers such standards at its peril, and without any of the breathing room enjoyed by other participants in the political process.

[12] The alternative apparently envisioned by the Court is that an organization can gain the protection of the *Noerr* doctrine as long as nobody with any economic interest in the product is permitted to exercise decisionmaking authority (i.e., vote) on its recommendations as to particular product standards. Insisting that organizations like the NFPA conduct themselves like courts of law will have perverse effects. Legislatures are willing to rely on such organizations precisely because their standards are being set by those who possess an expert understanding of the products and their uses, which are primarily if not entirely those who design, manufacture, sell, and distribute them. Sanitizing such bodies by discouraging the active participation of those with economic interests in the subject matter undermines their utility.

[13] I fear that exposing organizations like the NFPA to antitrust liability will impair their usefulness by inhibiting frank and open discussion of the health and safety characteristics of new or old products that will be affected by their codes. The Court focuses on the tactics of petitioner that are thought to have subverted the entire process. But it is not suggested that if there are abuses, they are anything more than occasional happenings. The Court does speculate about the terrible practices that applying *Noerr* in this context could lead us to condone in future cases, but these are no more than fantasies, since nothing of the sort occurred in the wake of *Noerr* itself. It seems to me that today's decision is therefore an unfortunate case of overkill.

NOTES

1) In *Allied Tube* the Court held that private SSOs should not be treated as governmental entities for the purposes of *Noerr-Pennington* petitioning immunity, even when they are in practice closely related to government action. In what circumstances or settings do you think that holding could do most harm?
2) Suppose that an SSO includes both implementers (*i.e.*, patent-practicing entities) and innovators (*i.e.*, patent-holding entities). What rules might you create to protect against collusion? What about to protect against exclusion? Do you think implementers or innovators are better situated to abuse the standard-setting process?
3) Do the trio of Supreme Court cases above suggest that antitrust courts should evaluate whether an SSO has a "biased" process? How could it measure this in practice?
4) Is every SSO a group boycott waiting to be sued?
5) We have addressed a number of cases in which IP owners have acted to harmed implementers of standardized technology. Are there also risks when SSO members may act collectively to disadvantage IP owners? What if an SSO's rules only allow the standardization of technologies that are licensed royalty-free? Is that a procompetitive collaboration, a *per se* illegal buyer cartel, or something else?