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Recommended Citation

Mark R. Patterson, *Leveraging Information about Patents: Settlements, Portfolios, and Holdups*, 50 *Houston L. Rev.* 483 (2012)

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ARTICLE

LEVERAGING INFORMATION ABOUT PATENTS: SETTLEMENTS, PORTFOLIOS, AND HOLDUPS

*Mark R. Patterson**

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* Professor of Law, Fordham University School of Law. I would like to express my appreciation to Greg Vetter and the University of Houston Law Center's Institute for Intellectual Property & Information Law for the invitation to participate in the IPIL's 2012 National Conference, and to the participants at the conference, including Colleen Chien, Kevin Emerson Collins, Paul Janicke, Sapna Kumar, Oskar Liivak, David Olson, Kristen Osenga, Lee Petherbridge, Kathy Strandburg, and Greg Vetter, for their very helpful comments. I also thank Tiffany Mahmood for valuable research assistance.

I. INTRODUCTION

Much recent scholarship focuses on the problems posed by uncertainty regarding intellectual property rights. In patent law, which is the focus of this Article,¹ this uncertainty relates primarily to the scope and validity of patents.² Uncertainty regarding scope and validity plays an important role in litigation decisions. With assessment of the likelihood of litigation success difficult and the cost of defending a patent infringement suit high, alleged infringers may choose to settle or to cease the allegedly infringing conduct, even if litigation would ultimately show that the challenged conduct was permissible.

In some patent cases, however, and particularly in some patent-antitrust cases, uncertainty plays a more fundamental role. In these cases, including cases involving Hatch-Waxman pharmaceutical settlements and deception in the standard-setting process, the patentee gains its competitive advantage not just from its exclusive control over its patent, or even from the cost of litigating the patent, but directly from the unavailability of information *about* the patent. That is, much of the patentee's power derives directly from the uncertainty, independent of actual litigation of the patent. Nevertheless, courts typically approach these cases as if they involved the same sorts of rights to exclude as in typical infringement cases. This Article considers

1. Analogous issues are presented by copyright law. See David Fagundes, *Crystals in the Public Domain*, 50 B.C. L. REV. 139, 150–60 (2009); Steven J. Horowitz, *Copyright's Asymmetric Uncertainty*, 79 U. CHI. L. REV. 331, 335–54 (2012); David S. Olson, *First Amendment Based Copyright Misuse*, 52 WM. & MARY L. REV. 537, 555–63 (2010); see also Clarisa Long, *Information Costs in Patent and Copyright*, 90 VA. L. REV. 465, 498–509, 516–20, 525–29 (2004) (comparing the two bodies of law).

2. See, e.g., JAMES BESSEN & MICHAEL J. MEURER, PATENT FAILURE: HOW JUDGES, BUREAUCRATS, AND LAWYERS PUT INNOVATORS AT RISK 46–72 (2008) (scope); Mark A. Lemley & Carl Shapiro, *Probabilistic Patents*, 19 J. ECON. PERSP. 75, 85–86 (2005) (validity); Kristen Osenga, *Linguistics and Patent Claim Construction*, 38 RUTGERS L.J. 61, 63–68 (2006) (scope); Lee Petherbridge, *The Claim Construction Effect*, 15 MICH. TELECOMM. & TECH. L. REV. 215, 220–21, 228–36 (2008) (scope); Michael Risch, *The Failure of Public Notice in Patent Prosecution*, 21 HARV. J.L. & TECH. 179, 187–89 (2007) (scope).

There are also calls for more disclosure of other “contextual” information about patents. See Colleen Chien, *Rethinking Patent Disclosure* (May 12, 2012), available at <http://digitalcommons.law.scu.edu/facpubs/404/> (“Rather than focusing only on the content of the patent, we need to keep in mind the context of the patent—for example, how many times it’s been cited, whether the patent is in force, whether it has international counterparts, if it’s been transferred, who owns it, whether it has been subject to reexamination or marking, and how many continuations have been filed on it.”); Irene Troy & Raymund Werle, *Uncertainty and the Market for Patents* 10, 15–18 (Max Planck Inst. for the Study of Soc’ys, Working Paper No. 08/2, 2008), available at <http://www.mpifg.de/pu/workpap/wp08-2.pdf>.

whether patentees are properly entitled to take advantage of uncertainty regarding their patents.

Claims that patentees are using their patents to gain advantages to which the patents do not entitle them are usually made through the defense of patent misuse or through analogous antitrust claims. The test in either case,³ at least as it has been stated in recent years, is whether the challenged practice is “reasonably within the patent grant, *i.e.*, that it relates to subject matter within the scope of the patent claims.”⁴ As the reference to “the scope of the patent claims” suggests, this test focuses on the nature of the patentee’s invention. Indeed, information about the invention is central to the allegations in typical misuse cases.⁵ Although courts do not often actually refer in the cases to the patents’ claims,⁶ they usually at least discuss the nature of the patentees’ inventions and compare them to the conduct at issue.⁷

The cases that will be discussed here are different, in that the inventions are almost irrelevant.⁸ For example, in the cases alleging failures to disclose patents before standard-setting bodies and later use of patent rights to “hold up” producers of the standardized products, there generally is no dispute that the standardized products infringe the patents at issue;⁹ instead, the disputes center on the significance of the patentees’ failures to disclose the existence of their patents. And in the cases regarding “reverse payment” settlements in the pharmaceutical industry, although validity and infringement are the underlying issues, the cases do not actually involve any evaluation of the inventions, prior art, or allegedly infringing products; instead, both the patentees and the alleged infringers use settlement agreements to prevent

3. The standards applicable to the patent misuse defense and to analogous antitrust claims have been similar.

4. *Mallinckrodt, Inc. v. Medipart, Inc.*, 976 F.2d 700, 708 (Fed. Cir. 1992). That is the test, the *Mallinckrodt* court said, when the conduct does not involve per se violations, like price-fixing or tying. *Id.*

5. See *Senza-Gel Corp. v. Seiffhart*, 803 F.2d 661, 670–71 n.14 (Fed. Cir. 1986) (“The law of patent misuse in licensing . . . need look only to the nature of the claimed invention as the basis for determining whether a product is a necessary concomitant of the invention or an entirely separate product.”).

6. But see, e.g., *Princo Corp. v. ITC*, 563 F.3d 1301, 1309–10 n.7 (Fed. Cir.), *vacated*, 583 F.3d 1380 (Fed. Cir. 2009).

7. See, e.g., *Senza-Gel Corp.*, 803 F.2d at 667–68, 670 & n.14.

8. See Gideon Parchomovsky & R. Polk Wagner, *Patent Portfolios*, 154 U. PENN. L. REV. 1, 66 (2005) (“As patent portfolios become more prevalent, it will be increasingly difficult to assess accurately the stand-alone value of individual patents.”).

9. In fact, the Federal Circuit recently held that in some circumstances infringement can be established by reference to an industry standard. See *Fujitsu Ltd. v. Netgear Inc.*, 620 F.3d 1321, 1327–28 (Fed. Cir. 2010).

litigation of those issues, preserving the uncertainty from which they both benefit.

The purpose of this Article is twofold. First, it points out the role played by uncertainty in three otherwise very different categories of cases, involving "reverse payment" settlements, patent portfolios and package licensing, and deception in standard-setting. Each of these three types of cases has been prominent recently. The source of the uncertainty in each of the three is different, but in each the unavailable information is not protected by patent law. In the reverse-payment cases, the information concerns the validity of a patent on a pharmaceutical product.¹⁰ In the portfolio cases, it concerns the existence and relevance of a large number, sometimes tens of thousands, of patents.¹¹ And in the standard-setting cases, the information concerns the existence of one or a few patents and their application to a standard.¹² In each type of case, the patentee, sometimes in concert with a potential licensee, is able to use the unavailability of the information to its advantage.

Second, the Article points out that in these cases the courts nevertheless apply rules that are more appropriate for the information about inventions that patent law is intended to protect. Patent law grants patentees the exclusive right to make, use, or sell their inventions, but it gives them no exclusive control over information about the existence, validity, or other characteristics of those patents. When cases turn not on the technical information *in* patents, but on the availability of "contextual" information *about* those patents,¹³ it is not clear that the courts should be so willing to apply rules that favor patents and patentees. For example, the presumption of validity may be a valuable tool when allocating burdens of proof in actual validity disputes. Yet it has also been applied in the "reverse payment" cases, which challenge agreements that *eliminate* the possibility of validity disputes. And the Federal Circuit has recently relied on uncertainties in the law of claim construction and claim interpretation to give patentees greater freedom in imposing package license arrangements.¹⁴ These uncertainties may be inherent in patent law, but they do nothing to promote

10. See *infra* Part III.A.

11. See *infra* Part IV.A.

12. See *infra* Part V.A.

13. See Chien, *supra* note 2 ("Making this information easier to access could also yield an important . . . additional benefit—solving the long-felt problem of how to identify valuable patents.").

14. See *Princo Corp. v. ITC*, 563 F.3d 1301, 1312 (Fed. Cir.), *vacated*, 583 F.3d 1380 (Fed. Cir. 2009).

innovation, so it is not clear that they should give patentees more freedom, rather than less.

Before discussing the three types of cases on which this Article focuses, the next section provides some background. First, it outlines two previous articles, one by Lemley and Shapiro and another by Parchomovsky and Wagner, that have addressed the uncertainty issue from a perspective somewhat similar to that here, though each article focused on only one of the three types of cases discussed here. Second, it describes how the courts, and particularly the Supreme Court, have previously considered the problem of uncertainty in antitrust and patent law. The subsequent sections then discuss the three types of cases, explaining the central role played by the unavailability of information about the patents at issue and describing how courts apply rules that are not always appropriate in the context of that uncertainty.

II. PATENTS AND UNCERTAINTY

A. *Probabilistic Patents and Patent Portfolios*

Several aspects of uncertainty regarding patents have been the subject of recent articles. The articles address these issues primarily from the perspective of current patent law and antitrust law. That is, they consider how uncertainty of patent protection affects results under current law, but for the most part they do not draw a distinction between the two types of information distinguished here: information in patents, which is information about inventions, and information about patents. The present Article builds on this work but focuses more on this distinction and on whether information about patents should be treated as protected information.

Mark Lemley and Carl Shapiro have discussed what they call “probabilistic patents,” observing that although all property rights are somewhat uncertain, “the uncertainty associated with patents is especially striking, and indeed is fundamental to understanding the effects of patents on innovation and competition.”¹⁵ They identify two distinct types of uncertainty: (1) uncertainty regarding the commercial value of patents; and (2) uncertainty regarding patents’ validity and scope, which becomes particularly significant in patent litigation.¹⁶ It is the latter source of uncertainty with which this Article is primarily

15. See Lemley & Shapiro, *supra* note 2, at 76.

16. *Id.*

concerned,¹⁷ though the standard-setting cases and portfolio cases could be viewed as implicating the former as well.

For the most part, Lemley and Shapiro view what they call "litigation uncertainty" as a problem to be solved by patent law.¹⁸ They offer several suggestions to encourage challenges of patents, which would lessen uncertainty, particularly uncertainty about the validity of the patents.¹⁹ They also discuss the possibility of anticompetitive settlements of patent claims in the pharmaceutical industry that provide for delayed entry by new entrants.²⁰ They compare these settlements, as recent cases have done, to payments by the patentee to keep competitors out of the market.²¹ Such agreements would generally be illegal under antitrust law, but the law in the patent context is arguably not so clear, as they suggest: "But is this same payment anticompetitive in the context of a patent settlement? Does the answer depend upon the strength of the patent?"²²

Although Lemley and Shapiro treat the problem as one of uncertainty and note that invalidation of a patent is a public good, they do not address the problem primarily as an informational one. Instead, they address the issue within the framework of patent law:

[A] patent does not give its owner the right to exclude rivals who are *allegedly* infringing, at least not without a court order. Payments from patent holders to *alleged* infringers in exchange for their agreement to stay off the market therefore go beyond the patent grant and exclude *allegedly* infringing competition, to the detriment of consumers.²³

The present Article is in agreement with Lemley and Shapiro's view that these settlement practices can, as they say, "go beyond the patent grant," but it focuses more explicitly on what this means and on how it relates to other patent-related informational issues. The perspective advocated here, as will be discussed further below, is not that an uncertain patent is being treated as a certain one, though that too would be a misapplication of patent law, but that the competitive advantage produced by a private settlement that preserves the uncertainty

17. Much of the contextual information about patents that is discussed by Colleen Chien would be of the first type. See Chien, *supra* note 2.

18. See Lemley & Shapiro, *supra* note 2, at 79–80, 85–87.

19. *Id.* at 85–90.

20. See *id.* at 91–95.

21. *Id.* at 91–93.

22. *Id.* at 92.

23. *Id.* at 93 (citation omitted).

is “beyond the patent grant” in that it concerns information that is not protected by patent law. Therefore, it should receive no protection from patent law.²⁴

Another patent information issue is addressed by Gideon Parchomovsky and Polk Wagner, who consider patent portfolios.²⁵ Their purpose is primarily to explain the “patent paradox,” the phenomenon that firms continue to seek patents—indeed, increasingly seek patents—despite the fact that the average value of individual patents has declined.²⁶ Their explanation is that with patent portfolios, the whole is greater than the sum of its parts. Indeed, they argue that in patent portfolios, the value of individual patents is increasingly irrelevant.²⁷ They describe the possible negative effects of this circumstance, which include increased complexity of patent litigation and advantages for holders of large portfolios.²⁸

Parchomovsky and Wagner propose several responses, mostly from within patent law. However, they also consider how antitrust law might respond to the shift toward portfolios, pointing to work by Daniel Rubinfeld and Robert Maness.²⁹ Rubinfeld and Maness address the uncertainty issue more directly:

The patent thicket creates considerable uncertainty for competitors about whether their technology infringes, especially with respect to a hidden or submarine patent. Even if a firm is not practicing submarine patents, a patent thicket makes it hard to design and sell products without running the risk of infringing on a competitor's patent. The resulting uncertainty can allow a firm to threaten infringement suits against competitors. One beneficial outcome (perhaps for both firms, but not necessarily for the public) is a cross licensing arrangement with a competitor.

....

... The uncertainty about the validity of each of the patents in the patent thicket along with the potentially

24. The result of a legal challenge would then turn on whatever other legal grounds might be available, independent of patent law. In the case of settlements, it would likely be antitrust law; in the case of deception before standard-setting organizations, it could be antitrust, contract law, equitable estoppel, or some other body of law.

25. Parchomovsky & Wagner, *supra* note 8, at 27–41.

26. *Id.* at 12–19.

27. *Id.* at 66.

28. *Id.* at 63–65.

29. *Id.* at 71–74 (discussing Daniel L. Rubinfeld & Robert Maness, *The Strategic Use of Patents: Implications for Antitrust*, in ANTITRUST, PATENTS AND COPYRIGHT: EU AND US PERSPECTIVES 89–91 (François Lévêque & Howard A. Shelanski, eds. 2005)).

substantial cost of litigation creates a strong incentive for the competitor to accept a licensing arrangement. As described previously, the license fee or royalty raises rivals' costs, and in doing so, creates a strategic advantage.³⁰

There is not necessarily anything anticompetitive, of course, with incentives to license, even if the license is to a patent portfolio rather than to an individual patent. A problem can arise, however, if the licensee is forced to take a license not so much as a means of gaining access to patented technology but instead as a means of avoiding uncertainty. It is not clear that the advantages conferred by this uncertainty are properly viewed as the rights of patentees. The uncertainty is not a product of innovation, so there is no clear reason for patent law to play a role. Instead, as discussed below, it could be that the costs created by the uncertainty, or at least any exacerbation of the uncertainty, should be viewed as the responsibility of the patentees.³¹ At the very least, courts should not use patent law, as the Federal Circuit has done, to provide *additional* protections for patentees when a "patent thicket creates considerable uncertainty for competitors about whether their technology infringes."³²

B. Uncertainty in the Supreme Court

The Supreme Court, unlike the lower courts, has been quite attentive to the costs of uncertainty, and more particularly to the costs of allowing private parties to take advantage of it at the expense of the public. The most prominent antitrust case on the issue is *National Society of Professional Engineers v. United States*.³³ In that case, an association of engineers adopted a canon of ethics prohibiting competitive bidding.³⁴ The Court held that the ban on competitive bidding was anticompetitive, stating that it "impedes the ordinary give and take of the market place," and substantially deprives the customer of "the ability to utilize and compare prices in selecting engineering services."³⁵

Although the Court in *Professional Engineers* did not approach the case explicitly as an informational one, it is the availability of information that makes possible the comparison of prices to which the Court referred. Essentially, it is information

30. Rubinfeld & Maness, *supra* note 29, at 89.

31. See *infra* Parts III.A, V.A, and text accompanying notes 106–111.

32. See *infra* text accompanying notes 125–134.

33. Nat'l Soc'y of Prof'l Eng'rs v. United States, 435 U.S. 679 (1978).

34. *Id.* at 681.

35. *Id.* at 692–93 (quoting *United States v. Nat'l Soc'y Prof'l Eng'rs*, 404 F. Supp. 457, 460 (D.D.C. 1975)).

that underlies “the ordinary give and take of the market place.” Moreover, the Court did not accept the argument that the association’s ban was justified by the possibility that “competitive bidding for engineering projects may be inherently imprecise and incapable of taking into account all the variables which will be involved in the actual performance of the project.”³⁶ Competition, the Court concluded, must be permitted to function regardless of the costs it may impose³⁷—imperfect information is better than no information.

Professional Engineers involved price information, but the Court later took a very similar approach to nonprice information.³⁸ In *FTC v. Indiana Federation of Dentists*, the defendant organization had adopted a policy under which its member dentists would withhold X-rays from insurance companies seeking to evaluate the dentists’ services.³⁹ The Court cited *Professional Engineers* and condemned the dentists’ policy:

A concerted and effective effort to withhold (or make more costly) information desired by consumers for the purpose of determining whether a particular purchase is cost justified is likely enough to disrupt the proper functioning of the price-setting mechanism of the market that it may be condemned even absent proof that it resulted in higher prices or, as here, the purchase of higher priced services, than would occur in its absence.⁴⁰

Both of these cases involved horizontal agreements, which are generally viewed much more critically than are vertical agreements or unilateral arrangements.⁴¹ Of the three types of cases to be discussed below, only those involving pharmaceutical settlements involve horizontal agreements.⁴² But the cases stand for more than the legal rules applicable to concerted action. They illustrate the Court’s recognition that markets only work well when information is available about the products offered on those markets. Consequently, it seems unlikely that the Court would

36. *Id.* at 694.

37. *See id.* at 695–96.

38. In a more recent case, *California Dental Association v. FTC*, 526 U.S. 756, 771–72 (1999), the Court took the view that nonprice information can be misleading, which can justify restricting its availability. But that justification is not applicable to the types of information discussed here.

39. *FTC v. Indiana Fed’n of Dentists*, 476 U.S. 447, 451 (1986).

40. *Id.* at 461–62.

41. *See Leegin Creative Leather Prods., Inc. v. PSKS, Inc.*, 551 U.S. 877, 888 (2007); *Copperweld Corp. v. Independence Tube Corp.*, 467 U.S. 752, 768–69 (1984).

42. *See infra* Parts III.A, IV.A, V.A (describing the characteristics of the three types of cases discussed in this Article).

approve of using market uncertainty to give patentees greater freedom in exercising their rights, at least where the public does not benefit.

This point is emphasized in the Court's patent cases, where it has been unsympathetic to arguments that private parties should be permitted to retain for themselves the value of information that could have provided public benefits. It has been skeptical even in the settlement context. In *United States v. Singer Manufacturing Co.*, the government brought an antitrust challenge to a settlement of a patent interference proceeding, arguing that there was a possibility that the interference proceeding could have resulted in invalidation or narrowing of both parties' claims.⁴³ The Court condemned the agreement and Justice White offered the following comments in concurrence:

In itself the desire to secure broad claims in a patent may well be unexceptionable—when purely unilateral action is involved. And the settlement of an interference in which the only interests at stake are those of the adversaries, as in the case of a dispute over relative priority only and where possible invalidity, because of known prior art, is not involved, may well be consistent with the general policy favoring settlement of litigation. But the present case involves a less innocuous setting. Singer and Gegauf agreed to settle an interference, at least in part, to prevent an open fight over validity. There is a public interest here, which the parties have subordinated to their private ends—the public interest in granting patent monopolies only when the progress of the useful arts and of science will be furthered because as the consideration for its grant the public is given a novel and useful invention. When there is no novelty and the public parts with the monopoly grant for no return, the public has been imposed upon and the patent clause subverted.⁴⁴

It is notable here that the Court rejected the settlement even though there was only "possible invalidity."⁴⁵ That is, the result of the interference was uncertain, so the parties could have defended the settlement as eliminating the uncertainty and its associated costs, yet the Court nevertheless struck it down.

The Court reinforced this view in a unilateral context in *Lear, Inc. v. Adkins*.⁴⁶ The issue in *Lear* was whether a licensee was estopped from challenging the validity of the patent it had

43. *United States v. Singer Mfg. Co.*, 374 U.S. 174, 185–89 (1963).

44. *Id.* at 199–200 (White, J., concurring) (citations omitted).

45. *Id.* at 198–99.

46. *Lear, Inc. v. Adkins*, 395 U.S. 653 (1969).

licensed.⁴⁷ Although the Court took the view that licensee estoppel was an established part of contract doctrine, it rejected it in the patent context.⁴⁸ Again it pointed to the conflicting interests of the private parties and the public:

Surely the equities of the licensor do not weigh very heavily when they are balanced against the important public interest in permitting full and free competition in the use of ideas which are in reality a part of the public domain. Licensees may often be the only individuals with enough economic incentive to challenge the patentability of an inventor's discovery. If they are muzzled, the public may continually be required to pay tribute to would-be monopolists without need or justification. We think it plain that the technical requirements of contract doctrine must give way before the demands of the public interest in the typical situation involving the negotiation of a license after a patent has issued.⁴⁹

As J. Thomas McCarthy has said, “[t]he ‘spirit of *Lear*’ appears to be one of providing some incentive to licensees to encourage them to challenge patent validity and to eliminate obstacles to suit by those disposed to challenge the validity of a patent.”⁵⁰

The Court recently reaffirmed this view in *MedImmune, Inc. v. Genentech, Inc.*⁵¹ The issue in *MedImmune* was whether a licensee that seeks to challenge patent validity or infringement must cease paying royalties on the license in order to establish a case or controversy that will allow the courts to entertain the action.⁵² The Court determined that it need not do so, because often the potential for an infringement action makes an agreement to pay royalties “coerced,” so that sufficient controversy persists between the parties to support jurisdiction.⁵³ Although *MedImmune* focused primarily on the case-or-controversy issue, it also commented on the patentee’s more specific patent-law arguments.⁵⁴ The patentee argued that permitting the licensee to at the same time pay royalties under the license and challenge the patent was to deny the patentee

47. *Id.* at 660–62.

48. *Id.* at 668–70.

49. *Id.* at 670–71. In *Lear*, the license was agreed upon before the patent was issued, but the Court ultimately applied the same rule for the entire post-patent-issuance period. *Id.* at 671–74.

50. J. Thomas McCarthy, “Unmuzzling” *The Patent Licensee: Chaos in the Wake of Lear v. Adkins (Part I)*, 59 J. PAT. OFF. SOC’Y 475, 476 (1977).

51. *MedImmune, Inc. v. Genentech, Inc.*, 549 U.S. 118, 137 (2007).

52. *Id.* at 120–21.

53. *Id.* at 122, 133 & n.12.

54. *Id.* at 134–36.

what it had negotiated under the contract.⁵⁵ The Court rejected this argument because the license did not include a no-challenge clause, but it seemed to express skepticism regarding the validity of the argument even if such a clause had been present.⁵⁶ At the least, the Court's approach validated the importance of challenges to patent validity.

Moreover, with reference to this Article's contention that patentees are using their patents to gain leverage from information about those patents, it is worth noting that the Supreme Court, subsequent to *Lear*, drew a connection between validity challenges and leveraging cases.⁵⁷ In *Blonder-Tongue Laboratories, Inc. v. University of Illinois Foundation*, the Court referred to validity challenges in stating that "[a] patent yielding returns for a device that fails to meet the congressionally imposed criteria of patentability is anomalous," and then observed that "[o]ne obvious manifestation of this principle has been the series of decisions in which the Court has condemned attempts to broaden the physical or temporal scope of the patent monopoly."⁵⁸ It quoted broad statements from *Mercoind v. Mid-Continent Investment Co.*, a misuse case:

The necessities or convenience of the patentee do not justify any use of the monopoly of the patent to create another monopoly. . . . The method by which the monopoly is sought to be extended is immaterial. The patent is a privilege. But it is a privilege which is conditioned by a public purpose. It results from invention and is limited to the invention which it defines.⁵⁹

The references to misuse in this context are especially significant because the issue in *Blonder-Tongue* was directly related to the issues here. The question in *Blonder-Tongue* was whether a finding of invalidity in litigation against one infringer could be given res judicata effect in subsequent litigation against other infringers.⁶⁰ A previous Supreme Court case had held that no estoppel effect would follow from a declaration of invalidity, but *Blonder-Tongue* overruled that holding.⁶¹ Thus, the effect of

55. *Id.* at 134–35.

56. *Id.* at 135–36.

57. See Alfred C. Server & Peter Singleton, *Licensee Patent Validity Challenges Following MedImmune: Implications for Patent Licensing*, 3 HASTINGS SCI. & TECH. L.J. 243, 333–37 (2011).

58. *Blonder-Tongue Labs., Inc. v. Univ. of Ill. Found.*, 402 U.S. 313, 343 (1971).

59. *Id.* at 343–44 (quoting *Mercoind v. Mid-Continent Inv. Co.*, 320 U.S. 661, 666 (1944)) (citations omitted).

60. *Id.* at 317.

61. *Id.* at 349–50, overruling *Triplett v. Lowell*, 297 U.S. 638 (1936).

Blonder-Tongue was to take what had been private information, applicable only to the original litigants, and made it public information, available to all. This approach, of treating information about patents as public information, is exactly the one advocated here.

III. SETTLEMENTS OF PATENT LITIGATION

A. *Hatch-Waxman Settlements*

Antitrust challenges to patent settlements resulting from filings under the Hatch-Waxman Act have been prominent in the last decade.⁶² The typical scenario is that of a settlement between a brand-name pharmaceutical manufacturer that owns a patent claimed to cover a particular drug and a potential generic entrant to the market for that drug.⁶³ The potential entrant, in compliance with Hatch-Waxman procedures, generally asserts either that the patent is invalid, that its product does not infringe, or both. Following the initiation of an infringement suit, as authorized by the Act, the parties settle the dispute on terms that typically allow the generic company's entry into the market, but only after some years' delay. Initially, these settlements were often accompanied by payments from the brand-name patentee to the generic challenger, called "reverse payments" because payments in patent litigation settlements typically run in the other direction, from licensee to patentee.⁶⁴ More recently, such payments have been eliminated in favor of other provisions, though some of those provisions can also be seen as compensation to the generic company for the delay.⁶⁵

The commentary in this area has generally focused on the effect of such a settlement on the alleged infringer's date of entry into the product market. Those who object to such settlements argue that the payment is made to (improperly) exclude competition until the agreed date.⁶⁶ Those who support the settlements—and most recent court decisions have upheld them—respond that without the settlement, and assuming the

62. See *infra* text accompanying notes 69–73 & notes 80–82 and accompanying text.

63. FED. TRADE COMM'N, PAY-FOR-DELAY: HOW DRUG COMPANY PAY-OFFS COST CONSUMERS BILLIONS 2 (2010), <http://www.ftc.gov/os/2010/01/100112payfordelayrpt.pdf>.

64. See *id.* at 4–10.

65. See Michael A. Carrier, *Unsettling Drug Patent Settlements: A Framework for Presumptive Illegality*, 108 MICH. L. REV. 37, 78–79 (2009) (describing how payments for generics not to enter the market have been replaced by payments for "IP licenses, for the supply of raw materials or finished products, and for helping promote products.").

66. See, e.g., Carl Shapiro, *Antitrust Limits to Patent Settlements*, 34 RAND J. ECON. 391, 407 (2003).

validity of the patent, entry would have been delayed even longer, until the patent expired.⁶⁷ Both arguments are focused on the entry date, and thus on the product market.

The difficulty of assessing the effect of the settlement in this way arises, of course, from the lack of information about patent validity. If the patent is valid, the settlement does not eliminate any competition that would otherwise have existed; if it is not, then the settlement preserves a monopoly when none is deserved. Information about validity, if available, would determine whether the settlement had any anticompetitive effect in the product market. Because it is not available, however, courts are unable to determine actual effect. Instead, as is discussed further below, they typically rely on patent law's presumption of validity. That is, they state that the patent is presumptively valid, so that there is no competitive harm from the settlement. In some cases, they have buttressed this approach by stating, somewhat disingenuously, that there is no challenge to the patent's validity, when the cases in fact rely on at least the possibility of invalidity, even if the challenger does not seek to litigate the validity issue in the antitrust court.⁶⁸

Even the recent, and much less deferential, *In re K-Dur Antitrust Litigation* decision of the Third Circuit adopted an approach that did not address the patent validity issue directly.⁶⁹ Although *K-Dur* relied on the importance of challenges to patent validity, under its approach "the only settlements subject to antitrust scrutiny are those involving a reverse payment from the name brand manufacturer to the generic challenger."⁷⁰ That is so, the court said, "because '[a]bsent proof of other offsetting consideration, it is logical to conclude that the *quid pro quo* for the payment was an agreement by the generic to defer entry beyond the date that represents an otherwise reasonable litigation compromise."⁷¹ For settlements involving reverse

67. See Henry N. Butler & Jeffrey Paul Jarosch, *Policy Reversal on Reverse Payments: Why Courts Should Not Follow the New DOJ Position on Reverse-Payment Settlements of Pharmaceutical Patent Litigation*, 96 IOWA L. REV. 57, 107 (2010) (noting that "an otherwise anticompetitive agreement is not anticompetitive if it is protected by a valid and infringed patent").

68. See *Schering-Plough Corp. v. FTC*, 402 F.3d 1056, 1068 (11th Cir. 2005) ("Although the FTC alleges that Schering's settlement agreements are veiled attempts to disguise a *quid pro quo* arrangement aimed at preserving Schering's monopoly in the potassium chloride supplement market, there has been no allegation that the '743 patent itself is invalid or that the resulting infringement suits against Upsher and ESI were 'shams.'").

69. *In re K-Dur Antitrust Litig.*, 686 F.3d 197 (3d Cir. 2012).

70. *Id.* at 218.

71. *Id.* (quoting *In re Schering-Plough Corp.*, 136 F.T.C. 956, 988 (2003), *vacated*,

payments, the court adopted the “quick look” rule of reason, which requires defendants to justify their conduct.⁷² The court thus replaced previous courts’ applications of a presumption of validity with what is effectively a presumption of invalidity. If the presence of a reverse payment is a good proxy for anticompetitive effect, this approach is probably an improvement, but it might also lead simply to the development of other means of avoiding validity challenges.⁷³ In that respect, it is not clear that the *K-Dur* approach will confront the validity issues that underlie these cases.

An alternative approach to these cases is not to focus on the product market or patent validity at all. Settlements of patent litigation have effects in another “market,” the one for information regarding the patent’s validity. Patent litigation requires the parties to produce information relevant to both the validity and the scope of the patent at issue. This information then helps define the protection, if any, provided by the patent, which is useful both for the litigants and for nonparties to the litigation.⁷⁴ Settlement prevents this information from being produced, or at least prevents it from being made public.⁷⁵ In several extreme cases, parties to patent settlements have even successfully sought to have previous judgments vacated.⁷⁶

In fact, the market for validity information is a real one, with firms competing in that market to provide search and analysis services for prior art.⁷⁷ The parties to Hatch-Waxman settlements would likely contract for such services if the litigation proceeded,⁷⁸ so the agreement not to pursue litigation

402 F.3d 1056 (2005)).

72. *Id.* (describing application of the “quick look” rule of reason analysis).

73. *See* Shapiro, *supra* note 66, at 78–79.

74. *See generally* Jay Pil Choi, *Patent Litigation as an Information-Transmission Mechanism*, 88 AM. ECON. REV. 1249 (1998).

75. It is possible that the parties would already be in possession of such information, which they might have obtained in anticipation of or preparation for the litigation.

76. *See* Jeremy W. Bock, *An Empirical Study of Certain Settlement-Related Motions for Vacatur in Patent Cases*, 88 IND. L.J. (forthcoming 2013) (noting the results of an analysis in which 78.5% of cases resulted in a granted motion for vacatur).

77. *See, e.g., List of Patent Search Firms*, AM. ASS’N LAW LIBRARIES, <http://www.aallnet.org/sis/pllis/Groups/PatentSearchFirms.doc> (last visited Nov. 9, 2012) (listing multiple patent search firms in America, Japan, and the United Kingdom); Farhad Manjoo, *How a Bunch of Amateur Sleuths Are Stamping Out Patent Trolls*, SLATE.COM (Feb. 29, 2012, 6:00 PM), http://www.slate.com/articles/technology/technology/2012/02/article_one_partners_how_a_bunch_of_amateur_sleuths_are_stamping_out_patent_trolls.html (“There’s an entire industry devoted to conducting such searches.”).

78. *See* Manjoo, *supra* note 77 (“When companies are sued for patent infringement, or when they’re proactively protecting themselves from an infringement claim, they often

is in some sense an agreement not to participate in that market.

From this perspective, a settlement of patent litigation is not so much a determination of the parties' rights to patented technology as it is a technique for preserving uncertainty regarding the patent rights at issue. That uncertainty is of value both to the patentee and to the alleged infringer if the patent is in fact invalid, because the settlement allows them both privileged access to the market.⁷⁹ It is also valuable to both parties even if the patent appears to be valid. Access to the market is a windfall to the challenger in that case, but for the patentee it is also valuable to avoid litigation that might narrow the patent or reveal strategies or damaging information regarding prior art that could be used by future challengers.

It might not be immediately clear how the information about the patent right differs from that right itself, but the distinction may be made more clear by reference to tangible property. Suppose there are two bridges, X and Y, over a river, and that all other means of crossing the river are significantly more expensive. Suppose also that A, the purported owner of both bridges, charges a monopoly price for crossing the river. Now, suppose that B asserts an ownership claim to bridge Y; perhaps B argues that a previous transfer to A was invalid and that B is the rightful owner. B also announces that if its claim to bridge Y is upheld, it will charge much less for crossing the river than A charges (though of course competition might make lower prices inevitable). Finally, suppose that A and B settle their dispute over ownership of bridge Y by agreeing that A will retain ownership for five years, after which ownership will be transferred to B. As part of this settlement, A pays B a sum of money, or perhaps compensates B in some other way.

It is difficult to imagine that a court would approve a settlement that keeps the bridge in A's hands, because the anticompetitive effect of such a settlement is clear. By making its claim to bridge Y, just as generic drug companies must allege validity or non-infringement under the Hatch-Waxman Act, B makes information about the property right competitively important. Moreover, in this tangible-property context, the property at issue, which is the bridge itself, and the information about it, which would be documentation of ownership and

hire a prior art search firm to look for related inventions.").

79. The generic company's actual access comes only with some delay, but if the settlement compensates it in some way for the delay, then it effectively enters the market immediately.

transfers, are separate. As a result, it is apparent that the competitive effects of settling the dispute arise from the agreement not to dispute that information, not from the property right itself.

In the patent context, though, the patent is intangible property that gives the patentee exclusive rights over the use of the information disclosed in the patent. That information both defines the scope of the property right itself and, based on its relationship to the prior art, determines its validity. Hence, the patent as property is not as easily distinguished from the information that determines its validity as in the case of tangible property. It may be for that reason that patent courts sometimes fail to distinguish the two sorts of information at issue: information about the invention, which is information over which the patentee has exclusive rights, and information about the patent's validity, over which the patentee has no exclusive rights.

B. Patent Validity and Scope of the Patent

Regardless of how the analogous issue would be resolved for tangible property, the legal treatment of Hatch-Waxman settlements has become quite deferential. One of the early appellate cases challenging a reverse payment held the agreement to be per se illegal on the ground that it is impermissible for the brand-name company to compensate the generic company for not competing, because it effectively allocates the market to the brand-name company.⁸⁰ Subsequently, though, the courts have focused more on the patent at issue. Some suggestions have been made, notably by the FTC, that the antitrust resolution of the cases should effectively be based on a mini-trial on patent validity, making antitrust depend explicitly on patent law.⁸¹ More recently, the courts have converged on an approach that focuses on the scope of the patent. The leading case states that “the proper analysis of antitrust liability requires an examination of: (1) the scope of the exclusionary potential of the patent; (2) the extent to which the agreements exceed that scope; and (3) the resulting anticompetitive effects.”⁸²

80. See *In re Cardizem CD Antitrust Litig.*, 332 F.3d 896, 907–08 (6th Cir. 2003) (holding that an agreement between a brand-name and generic company to delay the generic company's entry into the market in exchange of \$89.83 million was a per se illegal restraint of trade).

81. See *FTC v. Watson Pharm., Inc.*, 677 F.3d 1298, 1315 (11th Cir. 2012) (explaining the FTC's desire to decide “a patent case within an antitrust case about the settlement of the patent case”).

82. *Schering-Plough Corp. v. FTC*, 402 F.3d 1056, 1066 (11th Cir. 2005).

As described briefly above, inquiry into the “scope of the patent” has traditionally been used in misuse cases to determine whether a patentee is impermissibly enlarging its monopoly. It is not clear, however, what it could mean to say that an agreement that suppresses information about the validity of a patent is within the scope of the patent. A competitive effect that is within the scope of a patent would presumably be one that, at a minimum, turns on a right to exclusive use of information that is in that patent. That would be consistent with the interpretation of the concept that is applied in traditional misuse cases. But litigation about patent validity or infringement would not turn on any information to which the patentee has an exclusive right. One need not infringe a patent to litigate it.⁸³

The connection between misuse, or use of a patent outside its scope, and the act of bringing suit on a possibly invalid patent was made by the Supreme Court in *Blonder-Tongue* and by Lemley and Shapiro in their discussion of probabilistic patents.⁸⁴ In fact, the scope argument in this context is entirely circular. If the patent is valid, an agreement that delays entry of a competitor that uses the patented technology is within the scope of the patent, but validity is exactly the issue on which legality of the agreement turns, so relying on scope is assuming the result of the argument.⁸⁵ As suggested above, the courts here fail to appreciate that the uncertainty that the patentee is exploiting is neither within nor without the scope of the patent, but makes it impossible to know whether the patent is legally valid, i.e., whether it even makes sense to talk of the patent’s scope.

Courts also rely on patent law’s presumption of validity. Patent law provides that “[a] patent shall be presumed valid,”⁸⁶ and the court in *Schering-Plough* said that “without any evidence to the contrary, there is a presumption that the [patent at issue] is a valid one, which gives Schering the ability to exclude those who infringe on its product.”⁸⁷ But this elevates what is

83. In fact, the Hatch-Waxman Act itself gives the patentee the right to bring an infringement suit upon the generic company’s simple declaration that the patent is invalid or not infringed. See 21 U.S.C. § 355(c)(3)(C) (2006). And *MedImmune* allowed a claim of invalidity by a licensee in good standing. *MedImmune, Inc. v. Genentech, Inc.*, 549 U.S. 118, 122, 135 (2007).

84. See *supra* text accompanying notes 23–24 and 57–61.

85. See *In re K-Dur Antitrust Litig.*, 686 F.3d 197, 214 (3d Cir. 2012) (“[W]e take issue with the scope of the patent test’s almost un rebuttable presumption of patent validity. This presumption assumes away the question being litigated in the underlying patent suit, enforcing a presumption that the patent holder would have prevailed.”).

86. 35 U.S.C. § 282 (2006).

87. *Schering-Plough*, 402 F.3d at 1068; see also *In re Tamoxifen Citrate Antitrust Litig.*, 429 F.3d 370, 392 (2d Cir. 2005) (“[S]o long as the patent litigation is neither a

presumably a procedural device to a substantive rule.⁸⁸ The court said that: “Schering obtained the legal right to exclude [the potential generic entrants] from the market until they proved either that the [patent] was invalid or that their products . . . did not infringe Schering’s patent.”⁸⁹ That may be true, but it simply does not follow that the presumption should protect agreements that prevent exactly those challenges. By applying the presumption in this way, the courts are taking a provision that would normally be used in, and presumably is intended for, litigation that would resolve uncertainty regarding a patent, and they are relying on it to *preserve* that uncertainty.

That is not to say that the courts have ignored uncertainty in the Hatch-Waxman cases. In fact, they have emphasized it, and justified the settlements in part on the grounds that the uncertainty of patent litigation would lessen innovation incentives.⁹⁰ As described above, though, the Supreme Court has not taken this view, instead extolling the benefits of patent litigation, and in particular challenges to patent validity. Although uncertainty obviously imposes costs, the Hatch-Waxman cases fail to take into account the benefits and incentives of patent challenges. The presumption of validity is expressly rebuttable, which is a congressional choice of litigation uncertainty instead of the finality that a conclusive presumption could have established for patents.

Another aspect of uncertainty relied upon by the courts considering pharmaceutical settlements is what they describe as the Hatch-Waxman Act’s redistribution of risk, which they rely on to justify allowing settlements that eliminate patent challenges: “By contrast, the Hatch-Waxman Amendments grant

sham nor otherwise baseless, the patent holder is seeking to arrive at a settlement in order to protect that to which it is presumably entitled: a lawful monopoly over the manufacture and distribution of the patented product.”); *In re Ciprofloxacin Hydrochloride Antitrust Litig.*, 363 F. Supp. 2d 514, 529 (E.D.N.Y. 2005) (“Above all, making the legality of a patent settlement agreement, on pain of treble damages, contingent on a later court’s assessment of the patent’s validity might chill patent settlements altogether. Moreover, . . . such an approach would undermine the presumption of validity of patents in all cases, as it could not logically be limited to drug patents, and would work a revolution in patent law.”).

88. Section 282 follows its statement of the presumption with the direction that “[t]he burden of establishing invalidity of a patent or any claim thereof shall rest on the party asserting such invalidity.” 35 U.S.C. § 282 (2006); see also *In re K-Dur Antitrust Litig.*, 686 F.3d at 214 (“While persons challenging the validity of a patent in litigation bear the burden of defeating a presumption of validity, this presumption is intended merely as a procedural device and is not a substantive right of the patent holder.”).

89. *Schering-Plough*, 402 F.3d at 1066–67.

90. See *id.* at 1075 (“Finally, the caustic environment of patent litigation may actually decrease product innovation by amplifying the period of uncertainty around the drug manufacturer’s ability to research, develop, and market the patented product or allegedly infringing product.”).

generic manufacturers standing to mount a validity challenge without incurring the cost of entry or risking enormous damages flowing from any possible infringement.”⁹¹ This seems to assume that possible infringement liability outside the Hatch-Waxman context is a desirable restraint on validity challenges, but there is no support for that view elsewhere. Indeed, the Supreme Court’s elimination of licensee estoppel, and particularly its decision in *MedImmune*, which allowed a licensee to challenge the validity of a patent while still remaining protected by the license, appears to be a clear rejection of that view.⁹²

All this suggests that to the extent that some patent settlements serve to suppress valuable information, it could be appropriate to deny parties the ability to settle. That may seem like an extreme solution, but the value of settlements has been questioned before. In his essay *Against Settlement*, Owen Fiss took issue with the then-recent push toward alternative dispute resolution, and particularly with settlement of litigation.⁹³ He stated that “[t]o be against settlement is only to suggest that when the parties settle, society gets less than what appears, and for a price it does not know it is paying.”⁹⁴ He acknowledged a settlement’s benefit in resolving the dispute between the parties, but he nevertheless objected to settlements because they fail to achieve other purposes served by the judicial system.⁹⁵ In general, he argued, settlement is not preferable to judgment and “should be treated instead as a highly problematic technique for streamlining dockets.”⁹⁶

Several of Fiss’s concerns arose primarily with class actions and with other litigation for social change, but his aim was broader.⁹⁷ Anticipating an argument that his points would apply to only a subset of lawsuits, Fiss listed four situations in which he believes they are applicable, and one of those is “where there is a genuine social need for an authoritative interpretation of

91. *Id.* at 1074 (citing *In re Ciprofloxacin Hydrochloride Antitrust Litig.*, 261 F. Supp. 2d 188, 251 (E.D.N.Y. 2003)).

92. *MedImmune, Inc. v. Genentech, Inc.*, 549 U.S. 118, 135 (2007).

93. See Owen M. Fiss, *Against Settlement*, 93 YALE L.J. 1073, 1076 (1984) (discussing how alternative dispute resolution pressures parties to settle existing litigation and reduces future litigation).

94. *Id.* at 1085.

95. See *id.* (stating that adjudication “employs not strangers chosen by the parties but public officials” whose duty is to interpret and uphold the values in “authoritative texts such as the Constitution and statutes”).

96. *Id.* at 1075.

97. See *id.* at 1078–80, 1087 (stating that settlements impair individuals’ autonomy and do not provide procedures for authoritative consent from groups such as ethnic or racial minorities, inmates of prisons, or the mentally ill).

law.”⁹⁸ Because of the costs of uncertainty regarding patents, patent litigation is an instance where there is such a need. This is the basic point of *Lear* and *Blonder-Tongue*, and much of the language in those cases is an echo (actually, a pre-echo) of Fiss’s observations.⁹⁹ Although patent law presumes that a granted patent is valid,¹⁰⁰ it also recognizes that both the validity and the scope of patent claims are uncertain, and it makes them subject to litigation. Allowing patentees and licensees to subvert that process disturbs the balance struck by patent law.

Of course a settlement does not only suppress information to which the patentee has no exclusive right; it also can provide permission to use information about the invention, which is information to which the patentee *does* have an exclusive right. The difficulty is in deciding which is the more prominent effect of a settlement, or whether settlements that resolve disputes about access to patented information can be preserved while restricting settlements that suppress access to unpatented information. This is not the place for detailed exploration of these issues,¹⁰¹ but it is far from clear that the courts in the pharmaceutical cases have taken the right approach by not even seeking to address that problem, particularly as they seem to be going in a direction opposite from that of the Supreme Court. A focus on the informational effects of patent settlements could provide a helpful perspective on this issue.

IV. PATENT PORTFOLIOS AND LICENSING

A. *Information and Licensing*

As Parchomovsky and Wagner argue, when patent portfolios become larger, the inventions described and claimed in the individual patents in the portfolios become increasingly irrelevant.¹⁰² And patent portfolios have indeed become large. Microsoft apparently has more than 50,000 patents,¹⁰³ and very

98. *Id.* at 1087.

99. *See supra* text accompanying notes 46–61.

100. 35 U.S.C. § 282 (2006).

101. I offered some preliminary suggestions in a presentation at the 2011 Spring Meeting of the ABA Section of Antitrust Law. *See* Mark R. Patterson, Patent Settlements, Risk, and Competition, Patent Settlements: The Issues Beyond the “Reverse Payment” Cases, 59th Annual Antitrust Spring Meeting (Mar. March 30, 2011), *available at* http://ir.lawnet.fordham.edu/faculty_scholarship/2.

102. *See* Parchomovsky & Wagner, *supra* note 8, at 66 (stating that investors will focus on the value of an entire patent portfolio rather than individual patents because of the difficulty in assessing the value of individual patents).

103. *See* Order No. 32: Initial Determination Granting Microsoft’s Motion for

large portfolios have recently been transferred in significant acquisitions. Google is acquiring Motorola Mobility's portfolio of 17,000 patents and 6,800 applications,¹⁰⁴ and a coalition of Microsoft, Apple, RIM, and others are acquiring Nortel's portfolio, with 6,000 patents.¹⁰⁵

Potential licensees certainly want access to some of the specific technologies in these portfolios. It is also true, though, that the sheer number of patents in the portfolios makes evaluation of possible infringement very difficult. More important for competition purposes, the cost of assessing infringement potential is greater for larger portfolios. Therefore, holders of small portfolios are at a relative cost disadvantage to those with larger ones, independent of the significance of the patents themselves. This cost disadvantage in itself, independent of the actual content of the patents, can give holders of large portfolios a competitive advantage.

It is often assumed that these large patent portfolios are routinely cross-licensed. For example, the antitrust agencies' 2007 report, *Antitrust Enforcement and Intellectual Property Rights: Promoting Innovation and Competition*, considered the possibility that portfolio licensing could act as a barrier to entry, but said that some who had testified at the hearings questioned the significance of that danger because "companies engaged in portfolio cross-licensing are generally willing to license their portfolios to all interested parties."¹⁰⁶ This might have been true once, but the ongoing cell phone patent wars show that it is true no longer.¹⁰⁷ Moreover, even if licensing is achieved, the licensing,

Summary Determination of Respondents' First Affirmative Defense of Patent Misuse at 5, Certain Handheld Electronic Computing Devices, Related Software, and Components Thereof 11, Inv. No. 337-TA-769 (Jan. 31, 2012), 2012 WL 504367 at *2 [hereinafter Order No. 32] (referring to "Microsoft's over 65,000 patents"); Joff Wild, *Microsoft to Have 50,000 Patents Within Two Years, Phelps Reveals*, INTELLECTUAL ASSET MGMT BLOG (Oct. 21, 2008), <http://www.iam-magazine.com/blog/Detail.aspx?g=ae6e078c-5c40-4b8f-bb54-6e27314a4b39> (last visited Nov. 9, 2012) (reporting that Marshall Phelps, Corporate Vice President for Intellectual Property Policy and Strategy at Microsoft, stated that in 2010 Microsoft would have a portfolio of approximately 50,000 patents).

104. Press Release, Dep't of Justice, Statement of the Dep't of Justice's Antitrust Div. on Its Decision to Close Its Investigations of Google Inc.'s Acquisition of Motorola Mobility Holdings Inc. and the Acquisitions of Certain Patents by Apple Inc., Microsoft Corp. and Research In Motion Ltd. (Feb. 13, 2012), *available at* <http://www.justice.gov/opa/pr/2012/February/12-at-210.html>.

105. *Id.*

106. U.S. DEP'T OF JUSTICE & FED. TRADE COMM'N, ANTITRUST ENFORCEMENT AND INTELLECTUAL PROP. RIGHTS: PROMOTING INNOVATION AND COMPETITION 62 (2007).

107. See Josh Lowensohn, *2010 Apple License Offer to Samsung: \$30 Per Smartphone, \$40 Per Tablet*, CNET NEWS (Aug. 10, 2012, 8:51 PM), [http://news.cnet.com/8301-13579_3-57491406-37/2010-apple-license-offer-to-samsung-\\$30-per-smartphone-\\$40-per-tablet/](http://news.cnet.com/8301-13579_3-57491406-37/2010-apple-license-offer-to-samsung-$30-per-smartphone-$40-per-tablet/) (stating that Samsung rejected Apple's cross-licensing

or cross-licensing, process is expensive. There is surprisingly little research on the mechanics of the cross-licensing process, given its importance, but the source usually cited, an article by Peter Grindley and David Teece from 1997, describes years of preparatory work in cross-licensing.¹⁰⁸

The information costs of evaluating and licensing portfolios raise questions about Mark Lemley's theory of rational ignorance at the patent office.¹⁰⁹ He argues that even if the Patent and Trademark Office does a poor job at reviewing patent applications, little harm results because most patents will never be enforced anyway.¹¹⁰ In fact, he argues, spending money on doing a good job would in most cases be a waste of effort, and it is better for courts to conduct more thorough reviews, but only on patents that are litigated.¹¹¹ This theory reflects the phenomenon that Parchomovsky and Wagner sought to explain, which is that individual patents are becoming less and less valuable.¹¹² As they explain, though, patent *portfolios* continue to be valuable. Indeed, from a purely informational view, a portfolio of thousands of low-quality patents is more valuable than one of dozens of high-quality patents, because it is much more difficult and costly to assess. Lemley addresses the informational issue, but he does so by arguing that many licenses are royalty-free, though he acknowledges that there is little information on the issue.¹¹³ In any case, the point here is not that more money should be spent on patent examination, but that the informational aspects of portfolios have competitive significance.¹¹⁴

In the litigation context, the importance of the informational issue is highlighted when a firm seeks specifically to exploit it. An example of this occurred in recent litigation between Microsoft, as the patentee, and Barnes & Noble, maker of the Nook e-reader,

offer and instead the two went to trial). For more general information on the cell phone patent wars, see FOSS PATENTS, <http://www.fosspatents.com> (last visited Nov. 9, 2012).

108. Peter C. Grindley & David J. Teece, *Managing Intellectual Capital: Licensing and Cross-licensing in Semiconductors and Electronics*, 39 CAL. MGMT. REV. 8, 19 (1997).

109. See Mark A. Lemley, *Rational Ignorance at the Patent Office*, 95 NW. U. L. REV. 1495, 1514 (2001). Doubts about the "rational ignorance" approach are also offered in Colleen V. Chien, *Predicting Patent Litigation*, 90 TEX. L. REV. 283, 290–94 & n.64 (2011), which describes how problems associated with rational ignorance make it less than "optimal."

110. Lemley, *supra* note 109, at 1514.

111. *Id.* at 1510–11.

112. Parchomovsky & Wagner, *supra* note 8, at 66.

113. Lemley, *supra* note 109, at 1503–08, 1511–12.

114. Lemley briefly addresses the broader question of the social costs imposed by poor-quality patents, *id.* at 1515–20, but he does not focus on the issue addressed here.

which is an Android product.¹¹⁵ Barnes & Noble alleged that in their negotiations Microsoft initially refused to disclose which patents it claimed were being infringed unless Barnes & Noble agreed to a nondisclosure agreement.¹¹⁶ Then, when Microsoft filed a complaint with the International Trade Commission (ITC), some of the patents that it alleged were infringed were ones that it had not previously disclosed in the negotiations.¹¹⁷

There is of course no general obligation on patentees to disclose their patents to infringers prior to bringing suit,¹¹⁸ but Barnes & Noble contended, in effect, that Microsoft's practice was to use the informational value of its portfolio, as the court described:

Barnes & Noble argues that Microsoft has never definitely identified which of Microsoft's over 65,000 patents are infringed by Android and that Microsoft has not conducted "sufficient technical analysis before demanding licensing fees from original equipment manufacturers ('OEMs') and original device manufacturers ('ODMs')." Barnes & Noble contends that even though the patents are "trivial" it cannot work around them because Microsoft has said that it would simply come forward with other patents to assert against Barnes & Noble.¹¹⁹

More colorfully, in its petition for reconsideration of the dismissal of its misuse claim, Barnes & Noble cited deposition testimony contending that Microsoft's individual patents were irrelevant to its enforcement efforts:

[W]hat [Microsoft] basically told us was, it doesn't matter if you have defenses, whether you don't infringe, whether our

115. Amended Verified Complaint of Microsoft Corporation Under Section 337 of the Tariff Act of 1930, as Amended, Certain Handheld Electronic Computing Devices, Related Software, and Components Thereof, Inv. No. 337-TA-769 (Apr. 8, 2011), 2011 WL 1823599 ¶ 27.

116. Jay Greene, *Barnes & Noble Wants DOJ Probe into Microsoft Patent Tactics*, CNET NEWS (Nov. 8, 2011, 12:04 PM), http://news.cnet.com/8301-10805_3-57320800-75/barnes-noble-wants-doj-probe-into-microsoft-patent-tactics/.

117. Order No. 32, *supra* note 103, at 11, 2012 WL 504367 at *2. This is not the first occasion on which Microsoft has "asserted" patents without disclosing them. See Roger Parloff, *Microsoft Takes on the Free World*, FORTUNE, May 14, 2007, at 76, 82, available at http://money.cnn.com/magazines/fortune/fortune_archive/2007/05/28/100033867/ ("[Microsoft licensing official Horacio] Gutierrez refuses to identify specific patents or explain how they're being infringed, lest FOSS [free and open-source software] advocates start filing challenges to them.").

118. T.J. Chiang has argued that we should approach the problem of matching patents and possible infringers as one of imposing the search obligation on the lower-cost searcher, and that when a patentee is the lower-cost searcher but fails in its duty, the infringer should have a defense against infringement claims. See T.J. Chiang, *The Reciprocity of Search*, 66 VAND. L. REV. (forthcoming 2013) (manuscript at 19–20, 36–37), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1966676##.

119. Order No. 32, *supra* note 103, at 11, 2012 WL 504367 at *5.

patents are invalid, you're going to need to take a license, because there's no way that you can get out of our grasp, that we have so many patents that we could overwhelm you.¹²⁰

Although Microsoft and Barnes & Noble settled the case,¹²¹ preventing further development of the law on these issues, the dispute illustrates how a single patentee with 1,000 patents could potentially have greater power, at least in some respects, than 1,000 patentees, each with a single patent. The holder of a large portfolio of patents can threaten to exploit them sequentially as Microsoft did and can use nondisclosure to increase its power, options that are not available to holders of one or a few patents. The question then is whether this conduct should be permissible.

B. *The Costs of Validity Challenges*

In the Microsoft–Barnes & Noble litigation discussed above, the administrative law judge rejected a patent misuse theory, stating that “there is absolutely nothing about such tactics that expand the scope of any patent.”¹²² As with the use of the “scope” analysis for Hatch-Waxman settlements, it is unclear what the ALJ might have meant by this conclusion. It is true that Microsoft did not seek to restrict the use of non-infringing products, the most typical misuse practice.¹²³ But Microsoft’s reference to its plan to assert other patents suggests that enforcing the particular patents that it sued on was not Microsoft’s goal, either. Its goal, that is, was broader than those patents, and that begins to sound like misuse.

Suppose, drawing on Barnes & Noble’s allegation, that a patentee claimed to have dozens of individual patents that were

120. Respondents Barnes & Noble, Inc.’s and Barnesandnoble.com LLC’s Petition for Review of Order No. 32: Initial Determination Granting Microsoft’s Motion for Summary Determination of Respondent’s First Affirmative Defense of Patent Misuse 7, Certain Handheld Electronic Computing Devices, Related Software, and Components Thereof, Inv. No. 337-TA-769 (Apr. 8, 2011), available at <http://www.groklaw.net/pdf3/MSvBNITC-719445-471458.pdf>.

121. Paul Thurrott, *Microsoft and Barnes & Noble Settle Patent Battle, Will Team on Nook Spinoff*, WINDOWS IT PRO (Apr. 30, 2012, 8:48 AM), <http://www.windowsitpro.com/article/paul-thurrotts-wininfo/microsoft-barnes-noble-settle-patent-battle-team-nook-spinoff-142947>.

122. Order No. 32, *supra* note 103, at 11, 2012 WL 504367 at *5. It is worth noting, though, that the ALJ also said that “the patent laws provide Barnes & Noble with other avenues to obtain relief if the case is meritless or Microsoft engages in other litigation misconduct.” *Id.*

123. See Robin C. Feldman, *The Insufficiency of Antitrust Analysis for Patent Misuse*, 55 HASTINGS L.J. 399, 402 (2003) (discussing the history and theory behind patent misuse).

infringed by a competitor's product, but that it would not identify those patents for the competitor. Further suppose that the competitor could easily (though perhaps not quickly) design around each of those patents. Finally, suppose that the patentee brought suit on each patent sequentially, making clear that further suits were in the offing. What is the purpose, in an infringement suit based on patent *A*, of warning the alleged infringer that future suits, based on undisclosed patents *B*, *C*, *D*, *E*, and *F*, are coming? It seems that such a warning cannot be motivated by anything within the scope of patent *A*. Nor, presumably, could it be within the scope of the other patents, since those patents have not even been disclosed. As discussed above, for information to be within the scope of a patent, the information should be that which is protected by patent law. It is difficult to see how the use, or threatened use, of patents that are not disclosed could satisfy this test. Given that the alleged infringer has no means of assessing either validity or infringement, the "assertion" of undisclosed patents seems intended to exploit uncertainty, not to exploit patents.

A somewhat similar point regarding scope was made by Rubinfeld and Maness regarding the linking together in portfolios of strong and weak patents:

Bundling patents together into inseparable packages may also reduce a firm's incentive to challenge individual patents. If the cost of challenging patents increases with the number of patents included in the bundle, a firm may have an incentive to include weak patents in the package. Weak patents in conjunction with inseparable bundles can lead to patent misuse if the bundle is used to extend a firm's monopoly power from the "space" covered by a strong patent to the space encompassed by the strong and weak patents together. The package itself alters rivals' behavior in deciding whether it is efficient to license or design around individual patents, and raise costs directly (through license fees) and indirectly by altering the incentive to invest in R&D and to innovate.¹²⁴

The difference between the approaches of Microsoft and Barnes & Noble seems to be based on a fundamental difference in how the two parties view the role of patent portfolios. Microsoft seems to view a portfolio as a unit, to be licensed as a whole and in which the individual patents are not significant (presumably assuming that at least one of them is infringed). Barnes & Noble, on the other hand, appears to view a portfolio as a collection of

124. Rubinfeld & Maness, *supra* note 29, at 90-91.

individual patents, in which the validity and infringement of each is relevant. For Barnes & Noble, it appears that the royalties paid for a portfolio should be the sum of royalties on individual patents, rather than an undifferentiated total.

The Federal Circuit's cases seem to take Microsoft's side. Although the court has not considered portfolio issues in exactly this context, it has discussed related points in the context of patent pools, particularly in *U.S. Philips Corp. v. ITC*.¹²⁵ The court there relied on the difficulty of valuing individual patents in rejecting a claim of misuse based on a requirement of package licensing:

Finally, grouping licenses in a package allows the parties to price the package based on their estimate of what it is worth to practice a particular technology, which is typically much easier to calculate than determining the marginal benefit provided by a license to each individual patent. In short, package licensing has the procompetitive effect of reducing the degree of uncertainty associated with investment decisions.¹²⁶

As with the Hatch-Waxman courts above, the Federal Circuit here rightly points to the costs of uncertainty, but wrongly neglects the costs of the solution it approves. The discussion above suggests that potential licensees in the portfolio context could pay less, or perhaps avoid infringement entirely, if they knew what patents they were accused of infringing and whether it would be more efficient to license or design around the patents. To make the latter decision, the individual cost of licensing each individual patent would be needed. But if a patentee insists on licensing its portfolio as a whole, without identifying which particular patents are infringed or what the royalty for licensing them individually would be, a licensee is unable to make the determinations that are necessary for sensible decisionmaking in the licensing process.

Moreover, the passage above shows little concern for the possibility of and incentives for challenging individual patents. Indeed, the court reinforced its use of uncertainty as a justification for package licensing in a way that seems directly contrary to the Supreme Court's views in *Lear*:

Package licensing can also obviate any potential patent disputes between a licensor and a licensee and thus reduce the likelihood that a licensee will find itself involved in

125. *U.S. Philips Corp. v. ITC*, 424 F.3d 1179, 1191–93 (Fed. Cir. 2005).

126. *Id.* at 1193.

costly litigation over unlicensed patents with potentially adverse consequences for both parties, such as a finding that the licensee infringed the unlicensed patents or that the unlicensed patents were invalid.¹²⁷

This turns the uncertainty problem on its head. As the Supreme Court has made clear, the licensing of an invalid patent is at least akin to misuse,¹²⁸ so if package licensing assists patentees in avoiding findings of invalidity, that should be viewed as a cost, not a benefit.

The Federal Circuit also raised concerns about changes in licensing terms as either technology or views above the validity of the licensed patents evolved:

In addition, as in its per se analysis, the Commission did not acknowledge the problems with licensing patents individually, such as the transaction costs associated with making individual patent-by-patent royalty determinations and monitoring possible infringement of patents that particular licensees chose not to license. The Commission also did not address the problem, noted above, that changes in the technology for manufacturing compact discs could render some patents that were indisputably essential at the time of licensing arguably nonessential at some later point in the life of the license. To hold that a licensing agreement that satisfied the rule of reason when executed became unreasonable at some later point because of technological development would introduce substantial uncertainty into the market and displace settled commercial arrangements in favor of uncertainty that could only be resolved through expensive litigation.¹²⁹

This justification was explicitly rejected by the Supreme Court in *Zenith Radio Corp. v. Hazeltine Research, Inc.*¹³⁰ Although the Supreme Court there specifically acknowledged the transaction-cost concerns relied upon by the Federal Circuit, it did not believe that they overrode other factors:

We also think patent misuse inheres in a patentee's insistence on a percentage-of-sales royalty, regardless of use, and his rejection of licensee proposals to pay only for actual use. Unquestionably, a licensee must pay if he uses the patent. Equally, however, he may insist upon paying only for use, and not on the basis of total sales, including products in which he may use a competing patent or in

127. *Id.* at 1192-93.

128. *See supra* text accompanying notes 57-61.

129. *U.S. Philips Corp.*, 424 F.3d at 1198.

130. *Zenith Radio Corp. v. Hazeltine Research, Inc.*, 395 U.S. 100, 139-40 (1968).

which no patented ideas are used at all. There is nothing in the right granted the patentee to keep others from using, selling, or manufacturing his invention which empowers him to insist on payment not only for use, but also for producing products which do not employ his discoveries at all.

Of course, a licensee cannot expect to obtain a license, giving him the privilege of use and insurance against infringement suits, without at least footing the patentee's expenses in dealing with him. He cannot insist upon paying on use alone and perhaps, as things turn out, pay absolutely nothing because he finds he can produce without using the patent. If the risks of infringement are real and he would avoid them, he must anticipate some minimum charge for the license—enough to insure the patentee against loss in negotiating and administering his monopoly, even if in fact the patent is not used at all. But we discern no basis in the statutory monopoly granted the patentee for his using that monopoly to coerce an agreement to pay a percentage royalty on merchandise not employing the discovery which the claims of the patent define.¹³¹

Thus, the Supreme Court takes the view that changes in use of the patent should be reflected in changes in the licensing terms. A patentee may be justified in demanding that costs it incurs in licensing and changing the licensing terms be paid by the licensee, but it is not justified in insisting upon continued licensing of an invalid or non-infringed patent.

The Court recently reaffirmed this view in *MedImmune, Inc. v. Genentech, Inc.* As described above, the Court in *MedImmune* allowed a licensee to challenge a license after the licensee concluded that the patent was invalid and not infringed. The existence of the license did not make subsequent challenge impermissible:

[The licensee] is not repudiating or impugning the contract while continuing to reap its benefits. Rather, it is asserting that the contract, properly interpreted, does not prevent it from challenging the patents, and does not require the payment of royalties because the patents do not cover its products and are invalid.¹³²

Although this Article does not seek to offer a detailed solution for resolving these issues, the key is to ensure that

131. *Id.*

132. *MedImmune, Inc. v. Genentech, Inc.*, 549 U.S. 118, 135 (2007).

potential licensees have, or can obtain, the information that they need to decide whether to license, design around, or challenge particular patents. The Supreme Court has indicated that royalty terms that go beyond a typical one patent-one product scenario should derive from the "convenience of the parties rather than patent power."¹³³ For portfolios, that suggests that licensees should have the option to license, or to refuse to license, individual patents,¹³⁴ though the Court has also indicated that licensees can be required to pay the transaction costs of making that option available.¹³⁵ It also requires that licensees have the information needed to make the relevant decisions, which presumably would rule out the sorts of nondisclosure that Microsoft is alleged to have used against Barnes & Noble. Indeed, it might be appropriate to impose on patentees the sorts of disclosure obligations recently suggested by T.J. Chiang.¹³⁶

133. *Zenith Radio Corp.*, 395 U.S. at 138. The Court made that statement in the somewhat analogous context of royalty calculations based on total sales, in the case in which some of the sales are of products not covered by the relevant patents. *Id.* at 135. In *Zenith Radio Corp.*, the Court discussed its earlier decision in *Automatic Radio Manufacturing Co. v. Hazeltine Research, Inc.*, 339 U.S. 827 (1950), where it had approved such a calculation:

The Court's opinion in *Automatic Radio* did not deal with the license negotiations which spawned the royalty formula at issue and did not indicate that [the patentee] used its patent leverage to coerce a promise to pay royalties on radios not practicing the learning of the patent. No such inference follows from a mere license provision measuring royalties by the licensee's total sales even if, as things work out, only some or none of the merchandise employs the patented idea or process, or even if it was foreseeable that some undetermined portion would not contain the invention. It could easily be, as the Court indicated in *Automatic Radio*, that the licensee as well as the patentee would find it more convenient and efficient from several standpoints to base royalties on total sales than to face the burden of figuring royalties based on actual use. If convenience of the parties rather than patent power dictates the total-sales royalty provision, there are no misuse of the patents and no forbidden conditions attached to the license.

Id. at 138.

134. It is worth addressing one final, information-related argument from the Federal Circuit in *U.S. Philips* that could pose an obstacle to such a solution. The court said there that the nonessential patents in the package were "bonuses" given to the licensee for free. *U.S. Philips Corp.*, 424 F.3d at 1191-92. That is so, the court contended, because the patentee will charge the maximum possible price for its essential patents, so that the licensee will be unwilling to pay any more for nonessential patents. *Id.* This is incorrect. Suppose that a licensee is willing to pay \$100 to acquire both the essential and nonessential technologies. (Non-essential technology here presumably means a technology in which the patentee faces competition.) Suppose also that a nonessential technology that competes with the patentee's is available for \$10. The patentee could then charge a maximum of \$90 for the essential technology. It could also charge \$99 for the combination of the essential technology and its own nonessential technology. It cannot charge \$99 for the essential technology alone, as the court seems to believe.

135. See *supra* text accompanying note 131.

136. See *supra* note 118.

Such obligations, which he recommends when the costs to patentees of identifying potential infringers are lower than the costs of potential infringers of locating patents, are likely to be applicable in the portfolio context, as well as in the standard-setting context discussed in the next section.

V. DECEPTION IN STANDARD-SETTING

A. *Deception in Antitrust Law*

A final prominent example of an informational effect involving patents is that of deception before standard-setting organizations. The informational effects are obvious here: either information about the existence of the patent is hidden during the standard-setting process, or false information is provided about the patentee's future licensing terms, then, after adoption of a standard that incorporates the patented technology, the patentee demands significant royalties. The commitment of users to the standard, and thus to the patented technology, allows the patentee to exploit them by extracting a higher license price, in what is often referred to as a patent "holdup."¹³⁷

The issue in these cases is not so much uncertainty as deception.¹³⁸ (Even the nondisclosure of patents generally

137. Julie Brill, Comm'r, Fed. Trade Comm'n, *The Intersection of Patent Law and Competition Policy*, Keynote Address at the Silicon Flatirons Center, University of Colorado Law School 3 (Oct. 3, 2012), available at <http://www.ftc.gov/speeches/brill/121003patentip.pdf> ("We also recommended that courts incorporate into their injunction analysis concerns about the effect that an injunction may have on a patent holder's ability to obtain royalties exceeding the economic value of an invention—what we call 'patent hold-up.'").

138. It is possible, of course, that a patentee could be in a position to holdup firms complying with a standard even without deception. For example, if the patentee did not participate in the standard-setting process, it would generally have no occasion to make any commitment at all, truthful or deceptive, to the standard-setting organization. But most of the U.S. cases have involved at least arguably claims of deception. See Bruce H. Kobayashi & Joshua D. Wright, *Federalism, Substantive Preemption, and Limits on Antitrust: An Application to Patent Holdup*, 5 J. COMPETITION L. & ECON. 469, 489 (2009) ("Patent holdup involving deception forms the basis for the majority of recent cases involving opportunism against [standard setting organizations].").

Interestingly, in Europe, the focus is less on deception and more on the effort to extract large royalty payments, which in certain circumstances has itself been held to be abusive. See, e.g., *Orange-Book-Standard Decision*, Bundesgerichtshof [BGH] [Federal Court of Justice] May 6, 2009 (Ger.), KZR 39/06, *English translation available at* <http://www.ipeg.eu/blog/wp-content/uploads/EN-Translation-BGH-Orange-Book-Standard-eng.pdf> (discussing remedies available to licensees who consider licensor royalty claims to be excessive.); *Koninklijke Philips Electronics N.V. v SK Kasetten GmbH & Co. KG*, District Court The Hague, The Netherlands, 17 March 2010, Joint Cases No. 316533/HA ZA 08-2522 and 316535/HA ZA 08-2524. For a discussion and translation of relevant sections of *Koninklijke*, see *NL-Philips v. SK Kasetten/FRAND*, EPLAW PATENT BLOG (Mar.17, 2010), <http://www.eplawpatentblog.com/eplaw/2010/03/nl->

involves active deception, because most standard-setting organizations require that participants in the standard-setting process agree to disclose their patents.¹³⁹) Consequently, the Supreme Court cases discussed earlier are not directly relevant. It is possible that the Court would view deception as even more anticompetitive than private suppression of information, but that is not clear. Antitrust has not always applied a consistent approach to issues of deception, sometimes dismissing them as issues of consumer protection or fraud, rather than antitrust.

The lower courts that have considered deception issues in the context of antitrust cases have been reluctant to find violations.¹⁴⁰ As one court said regarding claims of disparagement of a rival, “[w]hile false or misleading advertising directed solely at a single competitor may not be competition on the merits, the fliers in question must have a significant and enduring adverse impact on competition itself in the relevant markets to rise to the level of an antitrust violation.”¹⁴¹ Although there are few antitrust cases that rest on deception claims, the courts typically follow an approach similar to that of the Second Circuit, which applies a presumption that false advertising’s “effect on competition” is *de minimis*.¹⁴² In *National Association of Pharmaceutical Manufacturers, Inc. v. Ayerst Laboratories*, the Second Circuit adopted the Areeda treatise’s suggestion that “a plaintiff may overcome the *de minimis* presumption ‘by cumulative proof that the representations were [1] clearly false, [2] clearly material, [3] clearly likely to induce reasonable reliance, [4] made to buyers without knowledge of the subject matter, [5] continued for prolonged periods, and [6] not readily susceptible of neutralization or other offset by rivals.’”¹⁴³

philips-v-sk-kassetten-frand.html. But under European competition law, high prices can be abuses of a dominant position, while in the U.S. only exclusionary conduct constitutes monopolization. *Communication from the Commission—Guidance on the Commission’s Enforcement Priorities in Applying Article 82 of the EC Treaty to Abusive Exclusionary Conduct by Dominant Undertakings*, 2009 O.J. (C 45) 7, 8; Herbert Hovenkamp, *The Monopolization Offense*, 61 OHIO ST. L.J. 1035, 1036 (2000); see also *infra* note 158 and accompanying text.

139. See Mark A. Lemley, *Intellectual Property Rights and Standard-Setting Organizations*, 90 CALIF. L. REV. 1889, 1903–06 (2002).

140. Maurice E. Stucke, *How Do (and Should) Competition Authorities Treat a Dominant Firm’s Deception?*, 63 SMU L. REV. 1069, 1083–85 (2010).

141. *Am. Profl Testing Serv., Inc. v. Harcourt Brace Jovanovich Legal & Profl Publ’ns, Inc.*, 108 F.3d 1147, 1152 (9th Cir. 1997).

142. *Nat’l Ass’n of Pharm. Mfrs., Inc. v. Ayerst Labs.*, 850 F.2d 904, 916 (2d Cir. 1988).

143. *Id.* (quoting 3 PHILLIP AREEDA & DONALD F. TURNER, *ANTITRUST LAW: AN ANALYSIS OF ANTITRUST PRINCIPLES AND THEIR APPLICATION* ¶ 738a (1978)).

Application of this test to the standard-setting context requires some adaptation. The first four criteria are directly applicable, but the fifth and sixth, which seem related, do not fit easily in the standard-setting context. Because the standard-setting process takes place over a limited period of time, the deceptive conduct need only be maintained during that period, and once the standard is adopted, the effect of the deception is difficult or impossible to “neutralize.” As the Third Circuit said in *Broadcom Corp. v. Qualcomm Inc.* regarding deception before a standard-setting organization, it is during “the critical competitive period that precedes adoption of a standard” that “[m]isrepresentations 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.”¹⁴⁴

It is clear, in any event, that at least in some of these cases the effect of the deception is far from *de minimis*. Hence, the Third Circuit in *Qualcomm* adopted a test directed particularly to the operation of standards-development organizations (SDOs):

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 [fair, reasonable, and nondiscriminatory, or 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.¹⁴⁵

The court concluded, therefore, that the allegations of deception in that case were sufficient to state an antitrust claim, on something akin to breach-of-contract theory,¹⁴⁶ but not all courts have reached similar results.

B. Power from Deception or Power from Patents?

Although the Third Circuit in *Qualcomm* addressed the deception issue, not all courts have done so. The courts that have rejected antitrust claims regarding deception during standard-setting have generally done so by not confronting the deception issues directly, instead focusing exclusively on the existence of

144. *Broadcom Corp. v. Qualcomm Inc.*, 501 F.3d 297, 313 (3d Cir. 2007) (citations omitted).

145. *Id.* at 314.

146. Presumably because antitrust does not have a well-developed analytical approach to deception, the court turned to contract, or at least to “promise,” for its test. See *infra* text accompanying notes 159–162.

patents. A particularly clear example was the district court decision in *Broadcom Corp. v. Qualcomm Inc.* that was reversed by the Third Circuit:

Qualcomm has a legal monopoly over the technology claimed in its patents. The incorporation of Qualcomm's WCDMA patents into the UMTS standard does not make Qualcomm an unlawful monopolist in the WCDMA technology market. To conclude otherwise would subject every firm with patents incorporated into an industry standard to antitrust liability, and eliminate the procompetitive benefits a SDO is designed to facilitate. When an SDO decides to incorporate one company's patented technology into a standard, the company holding the incorporated patents will be in a position to control that technology's distribution. Qualcomm's "power" to control the licensing of its patents is derived from the rights it enjoys as a patent-holder. The adoption of an industry standard neither diminishes nor augments this exclusionary right.¹⁴⁷

These statements are correct as far as they go, but they completely ignore the key point, which is the patentee's increased power created by its deception.

There are in fact three factors at play: the patentee's exclusive rights, the additional power provided by the adoption of the standard, and the patentee's deceptive conduct regarding whether it would exercise that power. The court is correct that Qualcomm had a legal monopoly, and it is correct that adoption of the standard did not alter that exclusionary right. However, Qualcomm had committed to license its technology on FRAND terms,¹⁴⁸ which was a voluntary relinquishment of its right to exercise whatever power the standardization would provide. The court dismissed the significance of this rationale:

The Court recognizes that Qualcomm's alleged "inducement" of the SDO may be considered anticompetitive conduct in the sense that a false promise biased the SDO in Qualcomm's favor, to the detriment of those patent-holders competing to have their patents incorporated into the standard. The elimination of competition in the WCDMA technology market, however, would result regardless of how the SDO decided which patents would comprise the standard. While Qualcomm's behavior may have influenced how the SDO would eliminate

147. *Broadcom Corp. v. Qualcomm Inc.*, No. 05-3350 (MLC), 2006 WL 2528545 at *9 (D.N.J. Aug. 31, 2006), *rev'd*, 501 F.3d 297 (3d Cir. 2007).

148. *Id.* at *2.

competition, it is the SDO's decision to set a standard for WCDMA technology, not Qualcomm's "inducement," that results in the absence of competing WCDMA technologies. Qualcomm's alleged inducement by false promise may give rise to a cause of action based on another legal theory, but they do not provide an antitrust cause of action.¹⁴⁹

The problem here is that the court is confusing a patent's legal "monopoly" with monopoly power. Monopoly power is the ability to charge supracompetitive prices, not the fact of being the only game in town. By making the FRAND commitment, Qualcomm denied itself the right to charge other than FRAND prices and thus voluntarily ceded the power that the standard provided. Moreover, it was the pre-standardization competition, acknowledged by the court,¹⁵⁰ that forced Qualcomm to make that commitment. It is true that the patent right and the standard eliminate post-standardization competition (in the sense of rivalry among competitors), but it was Qualcomm's pre-standardization deceptive conduct that gave it a monopoly in the economic sense. The court seems to have been confused by the existence of a patent, and the exclusive right that it provides, and as a result neglected the central issue of deception.

As noted above, the district court decision in *Qualcomm* was reversed, but a year after that reversal, a similar approach was taken in *Rambus Inc. v. FTC*, where the D.C. Circuit reversed the FTC's condemnation of Rambus's failure to disclose.¹⁵¹ The FTC had concluded that if Rambus had disclosed its patent position to the standard-setting organization, JEDEC, there would have one of two results: "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."¹⁵² The court rejected the first of these alternatives because the Commission conceded that it could not prove that another technology would have been chosen.¹⁵³

The court also rejected the second possibility because, it said, "an otherwise lawful monopolist's use of deception simply to obtain higher prices normally has no particular tendency to

149. *Id.* at *9.

150. *Id.*

151. *Rambus Inc. v. FTC*, 522 F.3d 456, 459 (D.C. Cir. 2008).

152. Opinion of the Commission [Public Record Version], *In re Rambus, Inc.*, No. 9302, at 74 (F.T.C. July 31, 2006), quoted in *Rambus Inc. v. FTC*, 522 F.3d 456, 461 (D.C. Cir. 2008).

153. *Rambus*, 522 F.3d at 464.

exclude rivals and thus to diminish competition."¹⁵⁴ That may be true of deception that is directed at customers, but it is not true in this context. The problem here is a failure to acknowledge the way in which information is important in standards competition. That failure is odd given the court's willingness to acknowledge the possibility that Rambus was able to use deception to obtain higher prices.¹⁵⁵ If the higher post-standardization prices did not result from exclusion of some alternative technology, then one wonders how they were obtained. That is, if no alternative technologies were available in the standard-setting process, Rambus could have disclosed its patent position, stated that it would charge the profit-maximizing price, and the standard-setting organization would have had no choice but to accept those terms.

It is true, as the court said, that the higher prices charged by Rambus did not exclude competition in the post-standard world,¹⁵⁶ but those higher prices were the result of the exclusionary effect in the standard-setting process. And it is not the case that only competitive effects resulting from *current* exclusion are of concern. Consider predatory pricing. There, the below-cost prices in the predatory-pricing period injure competition by excluding competitors.¹⁵⁷ Then, in the recoupment period, the higher prices are imposed.¹⁵⁸ In the recoupment period, the higher prices do not, of course, cause further exclusion; they are the product of the exclusion in the predatory period. But we do not thereby dismiss the harm in the recoupment period as a matter of no concern.

A closer analogy, perhaps, is that of post-contractual holdup. In a variety of markets, such as those involving franchising,¹⁵⁹ parties enter into contractual relationships that prompt relationship-specific investments by one or both parties. Generally speaking, the parties cannot fully protect themselves by contract from exploitation by the other party in these relationships, so they are vulnerable to post-contractual

154. *Id.*

155. *See id.* at 464–67.

156. *Id.* at 466.

157. Patrick Bolton, Joseph F. Brodley & Michael H. Riordan, *Predatory Pricing: Strategic Theory and Legal Policy*, 88 GEO. L.J. 2239, 2242–43 (2000).

158. *Id.*

159. *See, e.g.,* Benjamin Klein, *Market Power in Franchise Cases in the Wake of Kodak: Applying Post-Contract Hold-Up Analysis to Vertical Relationships*, 67 ANTITRUST L.J. 283, 286–87 (1999); Benjamin Klein & Lester F. Saft, *The Law and Economics of Franchise Tying Contracts*, 28 J.L. & ECON. 345, 356 (1985).

holdup.¹⁶⁰ In some cases, such holdup prompts antitrust claims.¹⁶¹ The courts' treatment of such claims generally turns on the pre-contractual availability of information and the effectiveness of pre-contractual competition. Even those who are generally skeptical of such claims acknowledge that the pre-contractual absence of information—and, presumably *a fortiori*, pre-contractual deception—can create post-contractual power that is subject to antitrust scrutiny.¹⁶²

One might acknowledge all this, yet wonder what it has to do with patent law. The answer comes in considering why the court overlooked the effect of Rambus's deception. The case in fact is very similar to *United States v. Microsoft Corp.*, in which the same court, the D.C. Circuit, reached the opposite conclusion regarding exclusionary conduct.¹⁶³ One of the allegations against Microsoft was that it had engaged in deceptive conduct that contributed to its monopoly power.¹⁶⁴ Bruce Kobayashi and Joshua Wright, who agree with the D.C. Circuit's reversal of the FTC's decision in *Rambus*, nevertheless point out that it is hard to reconcile the two decisions.¹⁶⁵ In each case, the allegations are of deceptive acquisition of monopoly power.

A likely explanation for the differing opinions is Rambus's possession of a patent. The court, like the district court in *Qualcomm*, seems to confuse possession of a patent with inevitable possession of unlimited monopoly power. This is evident in two respects. First, it places primary reliance on the statement that "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."¹⁶⁶ It is not at all clear, though, that Rambus was "an otherwise lawful monopolist." As discussed above, a patent provides a legal monopoly, but it does not necessarily create an economic one. In *Rambus*, the FTC explained that there were multiple

160. Klein, *supra* note 159, at 302.

161. See, e.g., *Eastman Kodak Co. v. Image Technical Servs., Inc.*, 504 U.S. 451, 455–56 (1992); *Broadcom Corp. v. Qualcomm Inc.*, 501 F.3d 297, 310 (3d Cir. 2007).

162. See Klein & Saft, *supra* note 159, at 324–25. Klein argues that post-contractual exploitation that involves only a price increase should generally be addressed through contract law, rather than antitrust. See *id.* at 324–26. But Klein's preference for contract over antitrust is based primarily on the fact that at least some price change is generally foreseeable. *Id.* Active deception is not similarly foreseeable. In any event, cases of deception in standard-setting are increasingly including claims for breach of contract.

163. *United States v. Microsoft Corp.*, 253 F.3d 34, 67 (D.C. Cir. 2001).

164. *Id.* at 75–76.

165. See Kobayashi & Wright, *supra* note 138, at 469, 491–92.

166. *Rambus Inc. v. FTC*, 522 F.3d 456, 464 (D.C. Cir. 2008).

technologies competing to be the standard.¹⁶⁷ At that point, Rambus's patent did not provide an economic monopoly. It was only through the deception that led to adoption of its technology in the standard that Rambus acquired its monopoly. In other words, it was not a lawful monopolist, if "lawful" means that its power was acquired through legitimate means.

Kobayashi and Wright make this point as well, focusing on the *Rambus* court's reliance on the Supreme Court's decision in *NYNEX Corp. v. Discon, Inc.*¹⁶⁸ In *NYNEX*, the defendant participated in a fraudulent scheme to overcharge its customers by overpaying to a subcontractor, resulting in higher regulator-approved rates, then receiving rebates from the subcontractor.¹⁶⁹ The plaintiff was a competitor of the subcontractor that lost business, it alleged, because it refused to participate in the scheme.¹⁷⁰ But there was no allegation that the deception involved in the scheme gave *NYNEX* greater power, as distinguished from allowing it to avoid regulatory supervision, as Kobayashi and Wright emphasize:

If the FTC's theory depended on the proposition that a lawful monopolist's deceit that raises prices is an antitrust violation, the D.C. Circuit is certainly correct that the proposition conflicts with *NYNEX*. Clearly, conduct by a lawful monopolist that merely results in higher prices is protected under both *NYNEX* and *Trinko*. However, for *NYNEX* to apply to deception claims, it must be the case that the patent holder is otherwise lawfully a monopolist at the time it engages in the deceptive conduct. But this is not the FTC's anticompetitive theory of patent holdup at all.¹⁷¹

As Kobayashi and Wright point out, the D.C. Circuit "does not clearly articulate its view concerning the relationship between *NYNEX* and conventional deceptive patent holdup theory—that is, the defendant's deception results in the acquisition of *otherwise non-existing* monopoly power and excludes alternative technologies as a consequence."¹⁷²

The court's attribution of Rambus's post-standardization power to its patent is also evident in its apparent view that only if unpatented technology had been adopted in the standard would

167. *Id.* at 459.

168. See Kobayashi & Wright, *supra* note 138, at 471 (citing *NYNEX Corp. v. Discon, Inc.*, 525 U.S. 128 (1998)).

169. *NYNEX*, 525 U.S. at 131–32.

170. *Id.* at 132.

171. Kobayashi & Wright, *supra* note 138, at 490.

172. *Id.* (emphasis added).

competition have been preserved. It says 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.”¹⁷³ The limitation to “non-proprietary” technologies suggests that the court believes that JEDEC’s adoption of *any* patented technology, whether Rambus’s or another’s, would create an “otherwise lawful monopolist” for which deception would be irrelevant. Once again, this neglects the role that deception played in creating Rambus’s monopoly power, if not its monopoly—i.e., single-seller—market share.

It seems unlikely that the court would have taken the same approach if Rambus’s “monopoly” was not from a patent. Suppose, for example, that a standard-setting organization was choosing between several alternative minerals for a standard, and one company, which owned all of the sources of one of the minerals, monopolium (perhaps through different companies, so that the unified ownership was not apparent), did not reveal its complete control over monopolium despite a requirement to do so. Then suppose that, after adoption of a standard requiring the use of monopolium, the company sought to charge a high price. Although it is possible that the *Rambus* court would have said even under these circumstances that the company was a “lawful monopolist” of monopolium, it seems more likely that it would have recognized that it was the company’s deception, not its control over the mineral, that had given it power.

In the standard-setting cases, then, although the courts have not misapplied patent-law concepts like the “scope of the patent,” they seem to have misapplied the basic concept of patent protection. It is not the case that a patent necessarily produces an economic monopoly, as courts frequently point out in other contexts. Patentees, like other sellers, can face competition or can make commitments that limit their power. Courts should give such competition and such commitments the same effect in cases involving patents as they do in other cases. Like information about the validity or existence of a patent, information about the licensing plans of a patentee is not information over which patent law grants exclusive control, so the presence of a patent should not alter the treatment of anticompetitive deception.

173. *Rambus Inc. v. FTC*, 522 F.3d 456, 463 (D.C. Cir. 2008).

VI. CONCLUSION

The patent-antitrust interface has changed, because the ways in which patentees seek to extend their patent rights beyond their technical contributions has changed. Formerly, antitrust challenges to conduct by patentees usually involved efforts by patentees to use their monopolies to gain advantages in markets that were beyond the scope of their patent claims. Such efforts posed problems for patent law and for antitrust, but both bodies of law developed doctrines that addressed this sort of "leveraging," generally by focusing on the patentee's technical contribution and denying it the right to profit by forcing the purchase of products beyond the scope of that contribution. This doctrinal approach was buttressed by antitrust's application of similar prohibitions against ties involving unpatented products.

In the three areas discussed in this Article, this technique is not applicable. In these areas, the patentee does not seek to gain power in other markets or over other products; it seeks instead to use uncertainty to increase the power derived from its patent. Potential competitors and licensees are forced to contend not only with the patentee's exclusive rights to its technical contribution, but also with uncertainty regarding the existence, boundaries, or validity of those rights. By creating, maintaining, or exacerbating this uncertainty, the patentee is able to increase its market power.

Whereas with market-to-market leveraging, patent law could turn to antitrust law's rules for distinguishing and governing markets, antitrust law is as yet ill-equipped to deal with informational issues. This Article does not propose specific solutions to the problems it identifies, but it points out several common features among the courts' misapplications of patent law. Generally speaking, when a patentee seeks an advantage from an absence of information about the existence or validity of its rights, there is no reason to apply patent law at all, and courts should simply apply the same rules that would apply in other contexts. Doing so would recognize that although patent law grants patentees exclusive rights over their technical contributions, information about the existence and validity of patent rights should remain in the public domain.