### Should We Breathe Life into

**Patent Misuse?** 

# **Robin Feldman<sup>1</sup>**

Patent misuse lies at the intersection of patent and antitrust law. The history and conceptual overlap of the two areas have left the doctrine of misuse hopelessly entangled with antitrust law.<sup>2</sup> As a result, a strong chorus of voices has argued that patent misuse should be subsumed under antitrust. According to this view, we should acknowledge the commonality of the two areas, and test patent misuse claims by applying antitrust principles. In particular, there should be no patent misuse unless the patent holder has violated the antitrust laws.

Current law in the area of patent misuse is moving in that direction. Courts continue to recite a mantra that patent misuse is aimed at practices that don't necessarily violate the antitrust laws and then blithely test for patent misuse by applying antitrust. The result is a confusing tangle of doctrine that distorts both patent misuse and antitrust.

The doctrinal confusion could be greatly eased by giving the courts a clear mandate to require an antitrust violation in testing for patent misuse. This article argues, nevertheless, that such an approach would be a mistake. Although the goals and policies of patent misuse and antitrust overlap, they are not the same in all areas. In particular,

<sup>&</sup>lt;sup>1</sup> Assistant Professor, Hastings College of the Law.

<sup>&</sup>lt;sup>2</sup> For general background on the difficult intersections of patent and antitrust law, see, e.g., Louis Kaplow, *The Patent-Antitrust Intersection: a Reappraisal*, 97 HARV. L. REV. 1813, 1820 (1984); Michael A. Carrier, *Unraveling the Patent-Antitrust Paradox*, 150 PENN. L. REV. 761 (2002).

requiring an antitrust violation for a finding of misuse would ignore significant concerns under patent policy.

The clearest example of the clash is extensions of the time of the patent grant. Patent misuse is often described as an impermissible attempt to broaden the patent grant, either by trying to expand the scope of the patent or extend the length of the grant. Time extensions, however, are a perfect example of how applying antitrust principles could lead to the wrong result under patent principles.

Applying antitrust principles to test extensions of time, we would apply a rule of reason inquiry which looks for market power, anticompetitive effects, and a balancing of such anticompetitive effects against competitive defenses. Where no market power exists, for example, antitrust would be unconcerned by an extension of time. This would be understandable given that antitrust is only concerned with certain types of effects in the marketplace.

Under the logic of the patent system, however, we limit the length of a patent, not just to avoid the types of results that antitrust law would recognize, but for other economic reasons as well. In fact, a key reason we limit the length of a patent is to minimize the duplicative activity that would otherwise result from the fact that we have a patent system and the way in which our patent system is designed. Thus, we would forbid an activity that extends the length of a patent grant even if that extension does not constitute recognizable harm under antitrust law.

The notion that it would be problematic to test time extensions solely by antitrust principles has intuitive appeal as well. If that were the rule, we would simply tell patent holders to choose how long they would like to hold their patent. Any extension would be

2

fine until it results in a full-blown antitrust violation, at which point we will decline to enforce it. How could it be that we grant a patent for 20 years, but we really mean 20 years plus as long as you stay below the radar screen of the antitrust laws?

As described above, applying antitrust principles to practices that have the effect of extending the patent grant could lead to a result that would differ from applying patent principles. In addition, maintaining the current doctrine creates confusion for those who are trying to structure exploitation of their patents within legitimate bounds.

The problem is not simply an academic one but is particularly important to companies in innovative fields such as those in the life sciences. These fields spawn unusual forms of intellectual property whose exploitation invites innovative commercial agreements. Entering unfamiliar ground, it is particularly important to define the limits of patent exploitation.

Thus, in addition to the theoretical discussion, this article describes a practical example of the problems inherent in the current course of patent misuse doctrine. In particular, Part IV discusses Reach-Through Royalties, a licensing arrangement found in the life sciences field.

Reach-Through Royalties are a method of licensing what are known as "research tools." These tools are not products sold to consumers but rather products used to develop the medicines, treatments, and medical tests that later will be sold to consumers.

Reach-Through Royalty payments are measured as a percentage of any final product sold to the consumer. In other words, a patent holder says, "I do not know if you will invent anything with my tool, and I do not know how much it will be worth, but if you do hit pay dirt, you must pay me a percentage of what you earn in the future." Reach-Through Royalties may result in royalties paid long after the patent on the research tool has expired. Is this a form of patent misuse? Is it an impermissible attempt to broaden the length of the patent?

If we test Reach-Through Royalties for patent misuse by applying antitrust principles, Reach-Through Royalties may be acceptable. The result under patent principles, however, would be quite different. A patent does not grant a guarantee of return. It offers a time-limited opportunity in which to try to garner a return on an invention. A patent holder may be unsuccessful in bringing a product to market during the patent period, for example, but we do not extend the time of the patent because extensions threaten to increase the overall duplicative activity of the system and to increase the societal cost of the patent system as a whole.

Thus, Reach-Through Royalties offer an example of the problems inherent in the current drift of patent misuse. If we limit the patent misuse inquiry by requiring an antitrust violation, we ignore significant concerns under patent principles.

Part I of this article describes the history of the doctrine of patent misuse and explains the cross-currents the Supreme Court was navigating when the doctrine first emerged. Part II dissects current Federal Circuit doctrine and describes how the doctrine veers off course. Part III offers a theoretical discussion comparing the application of antitrust principles with the application of patent principles in the context of evaluating behaviors that extend the time of a patent grant. Part IV applies this logic to the question of whether Reach-Through Royalties should constitute patent misuse.

#### I. History and Theory of Patent Misuse

Patent misuse is an affirmative defense to patent infringement, and it is generally defined as an impermissible attempt to extend the time or scope of the patent grant.<sup>3</sup> If a patent holder has misused its patent, courts will refuse to enforce the patent against any infringer.<sup>4</sup> The patent holder will be denied relief until the abusive practice has been abandoned and the effects of the practice have dissipated.<sup>5</sup>

A finding of patent misuse, will not result in monetary damages. The sole remedy for patent misuse is to render the patent unenforceable.<sup>6</sup>

## A. Early History

Early stirrings of the doctrine can be traced to cases in the late 19<sup>th</sup> and early 20<sup>th</sup> century. This period saw the passage of state and federal antitrust laws outlawing unreasonable restraints of trade and other anticompetitive behavior.<sup>7</sup>

During this time, patent defendants complained of schemes by patent holders to do precisely what the antitrust laws were designed to forbid – monopolize markets, fix prices, and create tying arrangements.<sup>8</sup> This raised the specter that patent holders were using the patent laws as an end-run around the antitrust laws.

<sup>&</sup>lt;sup>3</sup> See, e.g., Blonder-Tongue Labs. Inc., v. University of Illinois Foundation, 402 U.S. 313, 343-44 (1971) (explaining that patent monopolies should be free from fraud and inequitable conduct, a principle manifested in a series of decisions in which the Court has condemned attempts to broaden the physical or temporal scope of the patent monopoly); 6 DONALD S. CHISUM, CHISUM ON PATENTS § 19.04 (2001). <sup>4</sup> Upon a finding of misuse, a court will refuse to enforce the patent against any infringer, even one who

was not harmed by the abusive practice. See ID.

<sup>&</sup>lt;sup>5</sup> See, e.g., C.R. Bard, Inc. v. M3 Systems, Inc., 157 F.3d 1340, 1372 (Fed. Cir. 1998) (noting that a holding of misuse renders the patent unenforceable until the misuse is purged but does not invalidate the patent). <sup>6</sup> See, e.g., B. Braun Med. Inc. v. Abbott Lab., 124 F.3d 1419, 1428 (Fed. Cir. 1997) (monetary damages not awarded under a declaratory judgment counterclaim based on patent misuse because patent misuse simply renders the patent unenforceable).

<sup>&</sup>lt;sup>7</sup> Congress approved the Sherman Act in 1890 and the Clayton Act in 1914. *See Patent Rights and the Antitrust Laws* 17 COLUM. L. REV. 542, 542 nn. 1, 2.

<sup>&</sup>lt;sup>8</sup> See, e.g., Strait v. National Harrow Co., 51 F., 819 (N.D.N.Y. 1982) (monopolizing markets); See, e.g., Bement v. National Harrow Co., 186 U.S. 70 (1902) (price-fixing); Henry v. A.B. Dick, 229 U.S. 1 (1912) (tying); Heaton-Peninsular Button-Fastener C. v. Eureka Specialty Co., 77 Fed. 288 (6<sup>th</sup>th Cir. 1896) (tying).

Early caselaw did offer patent holders an opportunity to avoid antitrust law with impunity. Patent holders entered into agreements or imposed restrictions on the use of an invention that created market effects forbidden under the antitrust laws. Patent holders then avoided antitrust scrutiny by arguing that patent law provides an absolute shield, allowing the imposition of any restriction or agreement related to the use of an invention.<sup>9</sup>

The issue would arise in three different types of suits: affirmative claims for violation of the antitrust laws; defensive claims to fend off an infringement suit; and defensive claims to fend off a breach of contract suit involving a patent license. The underlying doctrinal problem, however, remained the same for all three. Could a body of case law granting monopolies could be reconciled with a body of case law curtailing monopolies, and if not, should one be subservient to the other?

Some early cases suggested resolving the tension by drawing a distinction between rights gained by patent and rights secured by private contract. According to this view, rights arising under patent law would not be subject to antitrust scrutiny but only to scrutiny under patent principles. Rights gained by contract, however, could be subject to an inquiry into the nature and character of the agreement, including whether the agreement constituted an unreasonable restraint of trade. <sup>10</sup>

<sup>&</sup>lt;sup>9</sup> For example, during Senate hearings, a German manufacturer commented that he had no reason to get excited about American antitrust law if he wanted to control the distribution of markets. He could accomplish the same goal through patent licensing. *See* Machlup, *supra* note x, at 11 n. 56 (citing Hearings before the Senate Committee on Patents on S. 2303 and S. 2491, pt. 3, 1318 (1942)).

<sup>&</sup>lt;sup>10</sup> See Henry v. A.B. Dick 224 U.S. 11, 29-30 (1912) (noting in dicta that the general rule in a patent infringement suit is absolute freedom as to the terms imposed on users whereas in a suit to recover damages upon the contract, one could conceivably defend on the grounds that the contract was against public policies such as the antitrust laws) *overruled on other grounds by* Motion Picture Patents Co. v. Universal Film Mfg. 243 U.S. 502, 514-17 (1917); Strait v. Harrow, 51 F. 819, 821 (N.D.N.Y. 1892) (noting that if the patent holder had sued for breach of contract, it might be pertinent to inquire into the nature of the agreement while in a suit for patent infringement, such an inquiry would be inappropriate).

Patent law itself appeared to offer few limitations on a patent holder's behavior, particularly the types of behavior defendants were complaining about. The first wave of cases decided during this period concluded that patent rights were quite broad. A patent confers the right to exclude others from making, using or selling the invention. As a corollary to these rights, a patent holder may choose to completely withhold the patented invention from the market.<sup>11</sup> Early cases reasoned that if a patent holder had the right to withhold the invention, this included the lesser right of dictating the terms on which others might use the invention.<sup>12</sup> How could the law restrict any terms a patent holder might impose if the patent holder could refuse to license on all terms?

Although patent law offered little relief, one might have expected defendants to fare better against breach of contract claims. Early Supreme Court cases, however, seemed to close down this option, using circular logic that precluded the possibility of raising antitrust defenses in cases sounding in contract as well as those sounding in

The *Strait v. Harrow* Court found further support for the distinction between patent and antitrust law by an analogy to land law. *See* Strait v. Harrow, 51 F. 819 (N.D.N.Y. 1892) (arguing that the law would not decline to enforce trespass rights just because you were doing something illegal with your land); *see also* 19 DONALD S. CHISUM, CHISUM ON PATENTS § 19.04[1][a] (2003)Chisum (describing the *Strait v. Harrow* analogy to land law). *But see* Mortimer Feuer, *the Patent Monopoly and the Antitrust* Laws 38 COLUM. L. REV. 1145, 1174 (1938) (suggesting logical flaws in a similar analogy).

<sup>&</sup>lt;sup>11</sup> See Heaton-Peninsular Button-Fastener Co v. Eureka Specialty Co. 77 Fed. 288, 294-95 (6<sup>th</sup> Cir. 1896); see also Henry v. A.B. Dick, 224 U.S. 11, 28 (1912). As described below, the Supreme Court later would overturn the notion that the right to completely withhold an invention from the market includes the lesser right of permitting others to use the invention on whatever terms the patent holder wishes. See text accompanying notes x-y, infra; Motion Picture Patents Co. v. Universal Film Mfg. 243 U.S. 502, 514-17 (1917). The rule that a patent holder may completely withhold an invention from the market continued, however, and was eventually codified in the 1988 Amendments to the Patent Act. See 35 U.S.C.A § 271(d)(4) ("No patent owner otherwise entitled to relief for infringement or contributory infringement of a patent shall be denied relief or deemed guilty of misuse or illegal extension of the patent right by reason of his having ... refused to license or use any rights to the patent;"). The interplay between a patent holder's right to withhold an invention and antitrust law's potential liability for "refusals to deal" continues to confound modern courts. See generally Peter M. Boyle, Penelope M. Lister, & L. Clayton Everett, Jr., Antitrust Law at the Federal Circuit: Red Light or Green Light at the IP-Antitrust Intersection? 69 ANTITRUST L.J. 739 (comparing In re Independent Serv. Orgs. Antitrust Litig., 203 F.3d 1322 (Fed. Cir. 2000), cert. denied sub nom. CSU L.L.C. v. Xerox Corp., 531 U.S. 1143 (2001) with Image Technical Services Inc. v. Eastman Kodak Co., 125 F.3d at 1195 (9th Cir. 1997)).

<sup>&</sup>lt;sup>12</sup> See Henry v. A.B. Dick 224 U.S. 11, 35 (1912) (the larger right embraces the lesser of permitting others to use upon such terms as the patentee chooses to prescribe); Heaton-Peninsular Button-Fastener C. v. Eureka Specialty Co., 77 Fed. 288 (6<sup>th</sup>th Cir. 1896) (same).

patent. This viewpoint appeared in dicta in *Henry v. A.B. Dick*, a case involving tying behavior by a patent holder.<sup>13</sup> The logic of *Henry v. A.B. Dick* also suggested that affirmative claims for violation of the antitrust laws against patent holders also would fail.<sup>14</sup>

The *Bement* Court had argued the following:

<sup>14</sup> See note x, supra [the immediately preceding footnote].

Congress responded to some of the implications of the *Henry v. A.B.Dick* case in the passage of an amendment to the antitrust laws, known as the Clayton Act. The Clayton Act provides among other things that tying can form the basis of an antitrust violation. *See* 15 U.S.C.A. § 14. (West 2003); *see also* Motion Picture Patents Co. v. Universal Film Mfg. 243 U.S. 502, 517 (1917). Tying occurs when a firm agrees to sell a product only on condition that the buyer purchases a different product as well or agree not to purchase a second product from another supplier. *See* Northern Pac. Ry. Co. v. United States, 356 U.S. 1, 5-6 (1958); *see also* H.R. Rep. No. 63-627, *pt. 1, at 13* (1914) (describing tying). The Clayton Act specifically refers to agreements relating to goods "whether patented or unpatented". *See* 15 U.S.C.A. § 14 (West 2003). With this language, Congress expressed its intent that contracts involving the exercise of patent rights should be subject to an affirmative claim for violation of the antitrust laws, at least in the case of tying. The Clayton Act language, however, did not answer the question of whether such contracts should be subject to other antitrust claims or whether infringement defendants could assert the Clayton Act, or any other state or federal antitrust provisions, as a defense.

<sup>&</sup>lt;sup>13</sup> In *Henry v. A.B. Dick*, the Supreme Court rejected an antitrust defense to a claim of patent infringement. In dicta, the court noted that if the suit had been one to recover damages for breach of contract, rather than for patent infringement, defendants could have raised public policy defenses such as antitrust. The Court, however, then cited an earlier Supreme Court opinion that had rejected an antitrust defense to a claim for breach of contract by arguing that Congress could not have intended the Sherman Act to apply to patents at all. *See* Henry v. A.B. Dick 224 U.S. 11, 29-30 (1912) (citing Bement v. National Harrow Co., 186 U.S. 70, 92 (1902)); see also Tying Clause Contract Limiting Use of Patented Article Invalidated – The Mimeograph Case (Henry v. A.B. Dick Co., 224 U.S. 1) Overruled, Vol. 84 No. 18 CENTRAL LAW JOURNAL 335 (1917). Thus, the A.B. Dick opinion suggested that antitrust would fail as a defense against a claim for breach of contract, as well as against a claim for patent infringement.

It is true that it has been held by this court that the act included any restraint of commerce, whether reasonable or unreasonable. But that statute clearly does not refer to that kind of a restraint of interstate commerce which may arise from reasonable and legal conditions imposed upon the assignee or licensee of a patent by the owner thereof, restricting the terms upon which the article may be used and the price to be demanded therefor.

<sup>186</sup> U.S. at 92 (citations omitted).

The *Bement* case makes most sense when considered in its historic context. The Sherman Act prohibits every contract in restraint of trade. Taken literally, the language could prohibit almost any business agreement. *See* National Soc'y of Prof'l Eng'rs v. United States. 435 U.S. 679, 688 (1978). Given the extensive reach of the language, the Supreme Court eventually interpreted the Sherman Act to forbid only those agreements that "unreasonably" restrain trade. *See* Mortimer Feuer, *The Patent Monopoly and the Antitrust* Laws 38 COLUM. L. REV. 1145, 1172 (1938).

The foundations of this test were laid in the case of Standard Oil Co. v. United States, 221 U.S. 1, 58 (1910). The *Bement* case, however, was decided prior to Standard Oil and at a time when the Court was still struggling to define the reach of the antitrust laws. The Court may have been willing to whisk contracts relating to patents out of the path of the antitrust laws when the antitrust laws seemed so insatiable.

The issue reached a crescendo for the Supreme Court in the Motion Picture Patents case, in which the patent holder brought an infringement suit to enforce restrictions that were squarely in violation of federal antitrust laws.<sup>15</sup> The case arrived on the Supreme Court's doorstep amid rising concerns about increasingly oppressive use of patents.<sup>16</sup> Although in theory, three avenues might have been available to curb patent holder behavior: affirmative claims under the antitrust laws; defensive claims in infringement suits; and defensive claims in breach of contract suits. All three, however, had been called into doubt.

The case concerned post-sale restrictions on a film projector. In particular, the film projector could be used only with film made by the patent holder. Subsequent purchasers of the machine were notified of the restriction by a plaque mounted on the machine.<sup>17</sup>

The Appellate Court found that the patent holder's behavior constituted tying and violated the Clayton Act.<sup>18</sup> The Appellate Court used this antitrust finding to bolster its

<sup>&</sup>lt;sup>15</sup> See Motion Picture Patents Co. v. Universal Film Mfg., 235 F. 398 (2d Cir. 1916). When the MPP opinion was issued, commentators struggled, with only limited success, to dissect the opinion and its broader implications. For immediate reaction to MPP, see Note, *The Right of the Patentee to Control the Use or Price of a Patented Article upon Resale*, 4 IOWA L. B. 40 (1918); *Patents –Restriction on Use – Future Conditions—Notice* 2 MINN. L. REV. 66 (1917-18); *Restraint of Trade: Common Law: Patents*, 5 CALIF. L. REV. 425 (1916-17); Note: *Patent Rights and the Anti-Trust Laws*, 17 COLUM. L. REV. 542; *Right of a Patentee to Restrict the Price and the Use of a Patented Article*, 31 HARV. L. REV. 298 (1917-18). *Tying Clause Contract Limiting Use of Patented Article Invalidated – The Mimeograph Case (Henry v. A.B. Dick Co., 224 U.S. 1) Overruled*, Vol. 84 NO. 18 CENTRAL LAW JOURNAL 335 (1917).

<sup>&</sup>lt;sup>16</sup> For example, the Supreme Court in the Motion Picture Patents case noted that patent holders had reacted to earlier cases by adopting "restriction expanded into more and more comprehensive forms until at length the case at bar is reached . . . . [t]he perfect instrument of favoritism and oppression." *See* Motion Picture Patents Co., 243 U.S. at 515; *see also* Note, *Contributory Infringement and Misuse – The Effect of Section 271 of the Patent Act of 1952*, 66 Harv. L. Rev. 909, 911 (1953) (noting that change in the personnel of the Supreme Court and growing awareness of the monopolistic abuses of tying clauses led to a sweeping limitation in Motion Picture Patents).

<sup>&</sup>lt;sup>17</sup> Patents on the film had expired, raising the specter that the arrangement was intended to extend the life of the expired film patents. *See* Motion Picture Patents Co. v. Universal Film Mfg., 235 F. 398, 400 (2d Cir. 1916).

<sup>&</sup>lt;sup>18</sup> See id. at 517; see also note x, supra (describing the passage of the Clayton Act).

conclusion that the restriction should not be enforced through a patent infringement claim.

The Supreme Court, however, refused to rely on a violation of the antitrust laws, suggesting instead that the proper focus of the analysis should be patent law.<sup>19</sup> Analyzing the problem from the perspective of patent law, The Court reasoned that a patent holder's rights are bounded by the invention itself. Thus, attempts to control products not described in the invention are outside the scope of what is granted by patent law and therefore could not be enforced through a claim of infringement. This logic repudiated the earlier notion that a patent holder's right to completely withhold an invention from the market embraced the lesser right of restricting the use by almost any terms.<sup>20</sup> Not all terms would be acceptable. Terms extending beyond the patented invention do not pertain to rights granted by the patent laws and cannot be enforced through a patent infringement claim.

Although declining the invitation to rely on a violation of the Clayton Act, the Supreme Court used the Clayton Act to support its conclusions about the potential evils of tying.

We are confirmed in the conclusion which we are announcing by the fact that ... [Congress] has enacted a law making it unlawful for any person engaged in interstate commerce "to lease or make a sale or contract for sale of goods, ... whether patented or unpatented ... on the condition, agreement or understanding that the lessee or purchaser thereof shall not use ... the goods ... machinery or

<sup>&</sup>lt;sup>19</sup> See Motion Picture Patents, 235 F. at 509, 514.

<sup>&</sup>lt;sup>20</sup> See id. at 514-517. For an interesting discussion of how changes in the Court's composition may have contributed to shifts in the relevant legal doctrines, see Comment, Restraint of Trade: Common Law; Patents, 5 CAL. L. REV. 425, 426-27 (1916-1917).

other commodities of a competitor . . . where the effect of such lease, sale, or contract for sale . . . may be to substantially lessen competition or tend to create a monopoly in any line of commerce. . . . Our conclusion renders it unnecessary to make the application of this statute to the case at bar which the circuit court of appeals made of it, but it must be accepted as a most persuasive expression of the public policy of our country with respect to the question before us.<sup>21</sup>

In short, the Court suggested that an analysis of the impact of tying and why we dislike it in antitrust circumstances would give further insight into why we dislike it in the context of patent policy. Just as tying is bad in an antitrust context because it improperly extends your monopoly, so tying is bad in a patent context because it extends the scope of your patent. The logic of the ruling, however, would rest on patent principles<sup>22</sup>

The Court kept the focus on patent law, in part, by reinforcing the distinction between patent and contract.<sup>23</sup> The Court then set aside the question of whether contracts relating to patents could be evaluated under antitrust.<sup>24</sup>

The Supreme Court would eventually answer the question by focusing on the notion of attempts to expand the time and scope of the patent beyond what is granted in the patent act. The court would reason that attempts to expand the time and scope constitute behavior outside the grant of the patent in whatever form those attempts might

<sup>&</sup>lt;sup>21</sup> *Id.* at 517-18.

 <sup>&</sup>lt;sup>22</sup> For a good list of articles from the late 1930s and early 1940s exploring the notion that use of a tying clause is outside the scope of the patent monopoly, see *Patents – Extent of Use of Patent – Use of Tying Agreement Bars patentee in Infringement Suit*, 9 U. CHI. L. REV. 518, 521 n. 15 (1941-42).
 <sup>23</sup> See Motion Picture Patents, 235 F. at 509, 514.

<sup>&</sup>lt;sup>24</sup> "The extent to which the use of the patented machine may validly be restricted to specific supplies or otherwise by special contract between the owner of a patent and the purchaser or licensee is a question outside the patent law, and with it we are not here concerned." Motion Picture Patents Co. v. Universal Film Mfg. 243 U.S. 502, 509 (1917).

arise.<sup>25</sup> Thus, behavior that formed the basis of a patent misuse defense could also form the basis of a defense that a contract was void or the basis of an affirmative claim for violation of the antitrust laws.<sup>26</sup> In all three settings, patent holders were considered to be acting outside the scope of the patent and therefore could not rely on the protections of the patent law.

Thus, although it would take the Court some time to fill in the details, Motion

*Picture Patents* formed part of the framework of an analysis that offered the possibility of harmonizing patent and antitrust.<sup>27</sup> Across a range of issues, the Court would focus on the concept of actions inside and outside the patent grant as a way to define the

<sup>&</sup>lt;sup>25</sup> For a general description of this notion in a related context, see Scott Paper Co. v. Marcalus Mfg., Co, 326 U.S. 249, 256-57 (1945); *see also* Sola Electric Co. V. Jefferson Electric Co., 317 U.S. 173, 177 (1942) [add parenthetical]; B. Braun Medical, Inc. v. Abbott Labs, 124 F.3d 1419, 1428 n.5 (Fed. Cir. 1997) (noting that precedent has explained that the same actions by a patentee that result in patent misuse may also serve as an element of an affirmative claim for damages. Therefore, a party in defendant's position might be entitled to damages under an antitrust or breach of contract theory); Senza-Gel v. Seiffhart, 803 F.2d 661, 668 (Fed. Cir. 1986) (noting that patent misuse may serve, as here, as a defense to a charge of patent infringement but also as an element in a complaint charging antitrust violation); Mercoid Corp v . Mid-Continent Inv. Co., 320 U.S. 661, 670-71 (1944) (finding of misuse does not dispose of the counterclaim for damages which is more than a defense but a separate statutory cause of action); Carbice Corp. v. American Patents Dev. Corp., 283 U.S.27, 34 n.4 (1931) (noting that in some cases, the attempt to use the patent unreasonably to restrain commerce is not only beyond the scope of the patent but also a direct violation of the Anti-Trust Acts).

<sup>&</sup>lt;sup>26</sup> Courts and litigants do not always use clear language differentiating between finding patent misuse as a defense to infringement and analyzing similar behavior as a defense to damages for breach of contract. *See, e.g.,* Zenith Radio Corp. v. Hazeltine Research, Inc, 395 U.S. 100 (1969) (holding no patent misuse in a breach of contract case). The implications of the two, however, can be quite different. *See* 1 HERBERT HOVENKAMP, MARK D. JANIS, & MARK A. LEMLEY, IP AND ANTITRUST § 3.3b3 p. 3-24 (2002) (noting that although the *Brulotte* case is read as a classic example of misuse, the court merely refused to enforce collection of some of the royalties, rather than refusing to enforce any rights until the misuse effects had dissipated); *cf* Senza-Gel v. Seiffhart, 803 F.2d 661 (Fed. Cir. 1986) (complaining that the parties had failed to adequately differentiate between patent misuse behavior in the context of an affirmative claim for antitrust violation and patent misuse behavior in the context of a defense).

<sup>&</sup>lt;sup>27</sup> For example, six years later, the Supreme Court would echo this approach in a Constitutional challenge to the Clayton Act in what is known as the *Second Shoe Machinery Case*. In the *Second Shoe Machinery Case*, the patent holder had argued that the Clayton Act constitutes a taking from patent holders without due process of law. *See* United Shoe Mach. Corp. v. United States, 258 U.S. 451 (1922). The Court upheld the Clayton Act by adhering to the notion that with tying agreements, patent holders act outside the bounds of the legitimate rights granted by the Patent Act. Given that Congress did not interfere with legitimate rights secured by the patent, Congress did not take anything. *Id.* at 464. *But see* Mortimer Feuer, *The Patent Monopoly and the Antitrust* Laws 38 COLUM. L. REV. 1145, 1160. (describing the Court's logic as resourcefully tugging at its own bootstraps).

relationship between patent and antitrust. Navigating this intersection, however, has occupied legions of courts and scholars for generations.<sup>28</sup>

More specifically, however, the decision in *Motion Picture Patents* established what would become known as the doctrine of patent misuse.<sup>29</sup> The Court further developed the doctrine in a series of cases, *Carbice*,<sup>30</sup> *Leitch*<sup>31</sup>, *Morton Salt*, <sup>32</sup>& *Mercoid*<sup>33</sup> against a backdrop of continued national concern about the use of patents.<sup>34</sup>

Of particular interest in the series is *Morton Salt*. In *Morton Salt*, the Court amplified its earlier decision by holding explicitly that patent misuse does not require a violation of the antitrust laws.

Id. at 679.

<sup>&</sup>lt;sup>28</sup> See Louis Kaplow, *The Patent-Antitrust Intersection: A Reappraisal*, 97 HARV. L. REV. 1813, 1815 (1984) (noting that the intersection of antitrust and patent policy has proved to be a source of perpetual confusion and controversy since the passage of the Sherman Act nearly a century ago).

<sup>&</sup>lt;sup>29</sup> See 1 HERBERT HOVENKAMP, MARK D. JANIS, & MARK A. LEMLEY, IP AND ANTITRUST § 3.2 p. 3-3 (2002) (noting that Motion Picture Patents case was the first application of the principle of patent misuse); Note, Contributory Infringement and Misuse – The Effect of Section 271 of the Patent Act of 1952, 66 Harv. L. Rev. 909, 911 (1953) (noting that court in Motion Picture Patents case relied on a rationale that would subsequently form the basis of patent misuse); see also Mercoid Corp v. Mid-Continent Inv. Co., 320 U.S. 661, 668 n. 1 (1944) (referring to the Motion Picture Patents case as evidence that the doctrine of patent misuse was developed later than a 1909 case).

<sup>&</sup>lt;sup>30</sup> See Carbice Corp. v. American Patents Dev. Corp., 283 U.S. 27 (1931).

<sup>&</sup>lt;sup>31</sup> See Leitch Mfg. V. Barber Co., 302 U.S. 458 (1938).

<sup>&</sup>lt;sup>32</sup> See Morton Salt Co. v. G.S. Suppiger Co., 314 U.S. 488 (1942).

<sup>&</sup>lt;sup>33</sup> See Mercoid Corp v. Mid-Continent Inv. Co., 320 U.S. 661 (1944). *Mercoid* presented particularly difficult facts in that the patent covered a combination, a sequence that is new but in which every element is old and unpatentable. *See* Mercoid Corp v. Mid-Continent Inv. Co., 320 U.S. 661, 678-79 (1944). Justice Jackson, in a portion of the dissent in which he agreed with the majority, described the patent in the following fashion:

<sup>[</sup>W]e have an abstract right in an abstruse relationship between things in which individually there is no right – a legal concept which either is very profound or almost unintelligible, I cannot be quite sure which.

<sup>&</sup>lt;sup>34</sup> Such concern prompted one scholar to note in 1938 that "in the past two decades, the patent has emerged as the greatest single monopolistic device." *See* Mortimer Feuer, *The Patent Monopoly and the Antitrust* Laws 38 COLUM. L. REV. 1145, 1145(1938). Similar concerns prompted Congressional inquiries and efforts by President Roosevelt to reform the patent laws. *See id; see also* Mercoid Corp v. Mid-Continent Inv. Co., 320 U.S. 661, 667 (1944) (expressing concern that if the court enforced the patent rights in the case, patent holders would obtain by contract what patents alone may grant thereby carving out exceptions the anti-trust laws, which Congress has not sanctioned).

In *Morton Salt*, the trial judge had dismissed an infringement suit with a one-page order citing a patent misuse case on tying grounds.<sup>35</sup> The Seventh Circuit reversed, arguing that the Trial Court should not have granted summary judgment on misuse without evidence that the patent holder's actions violated the Clayton Act.

The Supreme Court reversed, holding that the question for misuse is not whether the patent holder violated the Clayton Act, but whether a court of equity will lend its aid to protect a patent monopoly when the patent is being used to secure rights beyond the scope of the patent and therefore contrary to public policy.<sup>36</sup> An antitrust violation would not be necessary in order to prove patent misuse.

Thus, by the mid-1940s, the Supreme Court had delineated the basic outline of patent misuse. A patent holder commits patent misuse by trying to improperly extend the time or scope of the patent grant. By such behavior, the patent holder acts outside the

See Mercoid Corp v . Mid-Continent Inv. Co., 320 U.S. 661, 665-66 (1944).

<sup>&</sup>lt;sup>35</sup> See Morton Salt Co. v. G.S. Suppiger Co. v. Morton Salt Co., 31 F. Supp. 876 (D.C. Ill. 1940) (citing *American Lecithin Co. v. Warfield Co.*, 105 F. 2d 207 (7<sup>th</sup> Cir. 1939).

<sup>&</sup>lt;sup>36</sup> See Morton Salt Co. v. G.S. Suppiger Co., 314 U.S. 488, 490, 492 (1942). In addition, by invoking the notion of public policy, the Court emphasized that the primary purpose of the patent law is to serve the public interest. This focus on the public interest set the stage for a key part of the *Morton Salt* opinion: the defendant need not show direct damage from the behavior that qualifies as patent misuse. See Trade Regulation – Attempted Partial Monopoly of Unpatented Product as Defense to Suit for Direct Infringement, 42 COLUM. L. REV. 882, 884 (1942). Rather, a defendant has standing to raise any patent holder behavior that qualifies as misuse in a defense against an infringement suit. The Supreme Court would amplify this logic in the Mercoid case, noting that:

<sup>[</sup>i]t is the public interest which is dominant in the patent system. It is the protection of the public in a system of free enterprise which alike nullifies a patent where any part of it is invalid and denies to the patentee after issuance the power to use it in such a way as to acquire a monopoly which is not plainly within the terms of its grant. [citations omitted].

The relaxed standing requirement of the misuse doctrine has received considerable academic attention, much of it critical, although some supportive. *See, e.g.*, Mark A. Lemley, *The Economic Irrationality of the Patent Misuse Doctrine*, 78 CAL. L. REV. 1599 (1990) (critical); *see also* Albert R. Henry, *Limitations in the Grant of Letters Patent*, 27 CORNELL L. Q. 214, 236 (1942) (expressing surprise over the *Morton Salt* case and noting that the remedies under Sections 4 and 16 of the Clayton Act would not have been available to the defendant.); *but see* Note, *Is the Patent Misuse Doctrine Obsolete?* 110 HARV. L. REV. 1922, 1939 (1997) (arguing that although the substantive test for misuse should be subsumed under an antitrust analysis, the relaxed standing requirements of misuse should be maintained). This article examines the substantive test for patent misuse and does not address the question of whether the relaxed standing requirement should be maintained.

rights granted under the patent laws. Courts will refuse to enforce patent rights when a patent holder has engaged in misuse, at least until the patent holder has relinquished the misuse and the harm has dissipated.<sup>37</sup>

The logic of patent misuse must flow from the logic of patent policy. Antitrust doctrine may provide insight into why behavior might be suspect under the patent laws. In other words, an analysis of why we dislike tying in antitrust circumstances may provide insight into why we dislike it in the context of patent policy. Nevertheless, the foundation of a patent misuse case must rest on patent principles, not antitrust.

In order to constitute misuse, a patent holder's behavior need not rise to the level of a full antitrust violation. This notion is consistent with the view that patent misuse is tested under patent policy, not antitrust policy. Thus, while the behavior may be insufficient for a Sherman Act or Clayton Act violation, it may still constitute misuse.<sup>38</sup>

### B. Are All Extensions Unreasonable?

The doctrine of patent misuse rests on the notion that a patent holder may not try to extend the time or scope of the patent grant. The problem of identifying commercial behavior that extends the time and scope of the grant, however, would be more nuanced and difficult than the early decisions might have suggested.<sup>39</sup> As the doctrine developed

<sup>&</sup>lt;sup>37</sup> See Patents – Extent of Use of Patent – Use of Tying Agreement Bars patentee in Infringement Suit, 9 U. CHI. L. REV. 518, 520 (1941-42) (citing B.B. Chemical Co. v. Ellis, 62 S. Ct. 406, 408 (1942)).

<sup>&</sup>lt;sup>38</sup> See S. REP. NO. 100-83, at 65 (1987) Senate Judiciary Committee Report on S. 1200, Report no. 100-83 (1987) p. 65 (describing patent misuse law in Committee Report on Senate-passed version whose language ultimately was not adopted by Congress); *Zenith Radio Corp. v. Hazeltine Research, Inc.*, 395 U.S. 100, 140-41 (1960); Transparent-Wrap Mach. Corp. v. Stokes & Smith Co., 330 U.S. 637, 641 (1947) (describing this rule in dicta while citing Morton Salt Co. v. Suppiger Co. 314 U.S. 488 (1942)).

<sup>&</sup>lt;sup>39</sup> The practice of tying, which helped launch the doctrine of patent misuse, would prove to be far more complicated than it appeared at the time of the Clayton Act and the early patent misuse cases. In this early period, courts and commentators assumed that all tying should be prohibited thereby requiring application of a per se rule against tying.

further in the 1950s and 1960s, patent holders would ask the courts for additional freedom in defining contract terms. Recognizing the need for some flexibility in commercial arrangements, courts would struggle with behaviors that nominally appeared to extend the time or scope of the patent but seemed acceptable under patent principles.

For example, under patent misuse, a patent holder may not extract royalties for use of a patented invention after the patent has expired. Such an agreement would represent an extension of the time of the patent.<sup>40</sup> Nevertheless, the Supreme Court in dicta signaled its willingness to allow payments that extend beyond the expiration of the patent if they were analogous to extended payments for use prior to the expiration of the patent.<sup>41</sup>

The issue arose as part of a series of three cases which I will refer to as, Radio 1,

Brulotte, and Radio 2. In Automatic Radio v. Hazeltine Research (hereinafter "Radio

In a classic per se rule under the antitrust laws, we assume that the behavior is so likely to be dangerous that we do not require the type of proof of market power and anticompetitive effects that we require in other types of antitrust cases, and we generally do not allow defenses which might be weighed against the anticompetitive effects. *See* Jefferson Parish Hosp. Dis. No. 2 v. Hyde, 466 U.S. 2, 33 (1984) (O'Connor, J., concurring); 9 PHILIP E. AREEDA, ANTITRUST LAW¶ 1720a at 258 (1991); Robert H. Bork, *The Rule of Reason and the Per Se Concept: Price Fixing and Market Division*, 75 YALE L.J. 373, 384 (1966). In contrast, the per se rule applied in antitrust tying cases has evolved such that antitrust law now requires proof that the defendant has market power and some proof of potential anticompetitive effects and allows a variety of defenses. *See* Robin C. Feldman, *Defensive Leveraging in Antitrust*, 87 GEORGETOWN L.J. 2079, 2109-12 (1999) (describing the per se rule in tying cases compared to classic per se rules in antitrust). The test is still streamlined in comparison to the broader rule of reason inquiry in antitrust, but it is a far cry from the classic per se rule. The implication of this more nuanced approach to tying is that tying is not bad in all cases, at least not in the context of things that concern the antitrust laws.

<sup>&</sup>lt;sup>40</sup> See Brulotte v. Thys Co., 379 U.S. 29, 33-34 (1964). . See 1 HERBERT HOVENKAMP, MARK D. JANIS, & MARK A. LEMLEY, IP AND ANTITRUST § 3.3b3 p. 3-24 (2002) (noting that although *Brulotte* is considered the classic case for this principle, it is unclear whether the *Brulotte* opinion technically invoked the patent misuse doctrine given that the court merely refused to enforce collection of those royalties that accrued after expiration of the patents); see also Brulotte, 379 U.S. at 30.

<sup>&</sup>lt;sup>41</sup> In dicta in *Zenith Radio*, the Supreme Court read *Brulotte* as recognizing that patent holders may lawfully charge a royalty for practicing an invention prior to the expiration date but postpone the payment of those royalties beyond that time. *See* Zenith Radio Corp. v. Hazeltine Research, Inc. 395 U.S. 100, 136 (1969).

 $1^{"}$ ),<sup>42</sup> the Supreme Court considered a license to use a group of patents in return for a percentage of revenues from the final product. The license holder challenged the provision as patent misuse on the grounds that the agreement could require a payment on sales even if none of the patents was used.<sup>43</sup>

The Supreme Court rejected this argument, finding that the arrangement was not "unreasonable." Rather, it represented sound business judgment of the most convenient method of fixing value because it allowed the parties to avoid the effort of having to determine whether each radio embodied a particular patent.<sup>44</sup>

In a case from the same period, however, the Supreme Court considered a package license of a dozen patents used in a harvesting machine. Royalties were based on a percentage of the crop yield and continued to accrue beyond the expiration of all of the relevant patents.<sup>45</sup> The Court concluded that the arrangement constituted misuse by extending the length of the patent term, but distinguished *Radio 1*, stressing that the arrangement in *Radio 1* was "reasonable and convenient."<sup>46</sup>

Finally, almost 20 years after *Radio 1*, the Supreme Court considered the same licensing practice by the same radio company.<sup>47</sup> This time, however, the Court framed the question in different terms, and reached the opposite result from *Radio 1*.<sup>48</sup> The Court found that the arrangement potentially required payment for products that did not

<sup>&</sup>lt;sup>42</sup> See Automatic Radio MFG. Co., Inc. v. Hazeltine Research, 339 U.S. 827 (1950) [hereinafter "Radio 1"].

 $<sup>^{43}</sup>$  See Radio 1, supra note x, at 830.

<sup>&</sup>lt;sup>44</sup> See Zenith Radio Corp. v. Hazeltine Research, Inc, 395 U.S. 100, 137 (1969) (describing *Radio 1*).

<sup>&</sup>lt;sup>45</sup> See Brulotte v. Thys Co., 379 U.S. 29, 29-30 (1964).

<sup>&</sup>lt;sup>46</sup> *See id.* at 32-33.

<sup>&</sup>lt;sup>47</sup> See Zenith Radio Corp. v. Hazeltine Research, Inc, 395 U.S. 100 (1969) [hereinafter "Radio 2"].

<sup>&</sup>lt;sup>48</sup> The Court may have been more inclined to be hostile towards the licensing arrangement this time given a lower court's finding that the patent holder had participated in a conspiracy to exclude the defendant from the Canadian market in violation of the antitrust laws. *See Radio 2* at 107. Thus, the Court in *Radio 1* was willing to accept what was essentially the dissent's argument in *Radio 1*.

incorporate the teachings of the patent at all, and concluded that the license extended the scope of the patent beyond the invention specified in the patent grant. <sup>49</sup>

How could one determine, however, whether the agreement was a reasonable business convenience consistent with rights granted under a patent or whether it was the result of forcing? The *Radio 2* Court held that the question would turn on a detailed factual examination of the contract negotiations to determine whether the patent holder used the power of its patent to override the objections of the licensee.<sup>50</sup>

The effort to focus on whether the agreement was a reasonable and convenient business arrangement may have flowed from a simple necessity to distinguish *Radio 1*. The focus, nevertheless, is consistent with general doctrines of equity, and it is equity that is applied in a suit to enjoin infringement.<sup>51</sup> A key maxim of equity dictates that one who requests equity must have clean hands. This maxim invites examination of the behavior of the patent holder, the one who is asking for the equitable remedy of an injunction.<sup>52</sup>

<sup>&</sup>lt;sup>49</sup> See Radio 2, supra note x, at 138.

<sup>&</sup>lt;sup>50</sup> See id. at 139-40 (describing the test and remanding for further proceedings under the test).

<sup>&</sup>lt;sup>51</sup> See CHARLES W. BACON & FRANKLYN S. MORSE, THE REASONABLENESS OF THE LAW 197,181-82 (1924)181-82 (describing the evolution of the doctrine of equity and noting that the common law provides damages as a remedy while equity evolved to address wrongful acts that cannot be sufficiently addressed by monetary awards); *cf.* Robert P. Merges, *Reflections on Current Legislation Affecting Patent Misuse*, 70 J. PATENT & TRADEMARK OFF. SOC. 793, 794 (1988) (arguing against the pitfalls of relying on a rule of reason analysis and in favor of the flexible judicial approach that has evolved in patent misuse over the years embodied in the notion of reasonableness). <sup>52</sup> See BACON & MORSE, *supra* note x, at 196. Interestingly, an early unclean hands case involved what

<sup>&</sup>lt;sup>52</sup> See BACON & MORSE, supra note x, at 196. Interestingly, an early unclean hands case involved what would later become a trademark right. In Fetridge v. Wells, 4 Abbott's Practice Rep., 144 (D.N.Y. 1857), the manufacturer of a product sold as "The Balm of a Thousand Flowers" sued to enjoin the defendants form manufacturing "The Balm of Ten Thousand Flowers." The court refused to enter the injunction on the grounds that the original manufacturer was perpetrating a fraud on the public because the product was neither a balm nor a cosmetic. See BACON & MORSE, supra (describing the case). The Court denied the injunction noting that "[t]hose who come into a court of equity seeking equity must come with pure hands and a pure conscience. . . An exclusive privilege for deceiving the public is assuredly not one that a court of equity can be required to aid or sanction." See id. (quoting the decision).

Equity is a question of balance in which the Court will consider whether it would do a greater injury by granting the injunction, for example, than by refusing to act.<sup>53</sup> Such a balancing includes an examination of the public interest.<sup>54</sup>

The principles of equity also allow flexibility concerning behavior that appears to constitute unclean hands. For example, if a defendant asserts that a suit cannot be maintained because the plaintiff has delayed, a court may rule that the delay is reasonable given that it did not affect the equities in the case.<sup>55</sup> In other words, even behavior that appears to constitute unclean hands may be subject to an examination of whether it affects the underlying principles at stake. This notion is consistent with the view that a court, when faced with behavior that appears to extend the physical or temporal scope of a patent grant may ask whether that behavior is nevertheless consistent with underlying patent principles.

The notion of applying a flexible test under equitable principles while following the dictates of patent law is sound. The focus of the Court's inquiry in *Radio 2*, however, is more problematic. The Court focused the inquiry on an examination of whether the licensee entered into the agreement voluntarily. As one authority notes, "[c]ontract law has rightly shied away from inquiring into whether one party 'wanted' to agree to a contractual provision in all but the most egregious cases".<sup>56</sup> The inquiry invites self-serving testimony and encourages strategic behavior in which parties try to include

<sup>&</sup>lt;sup>53</sup> See Richard's Appeal, 57 Pa. 105, 114 (1868) (imposing an injunction against coal burning); see also PETER CHARLES HOFFER, THE LAW'S CONSCIENCE 151-52 (1990) (describing post Civil War development of the notion of balancing in equity cases).

<sup>&</sup>lt;sup>54</sup> As the Supreme Court declared in the *Arizona Copper* case:

<sup>[</sup>E]quity will not lose sight of the public interest. A court of equity is never active in granting relief against public convenience merely for the purpose of protecting a technical legal right. See Arizona Copper Co. v. Gillespie, 230 U.S. 46, 51 (1913).

<sup>&</sup>lt;sup>55</sup> See <u>Wafer Shave v. The Gillette Company</u>, Wafer Shave v. Gillette Co., 857 F. Supp. 112, 128 (D. Mass. 1993).

<sup>&</sup>lt;sup>56</sup> See 1 HOVENKAMP & LEMLEY, supra note x, at § 3.3, p. 3-22 (discussing Radio 2 and its progeny).

evidence of voluntariness into the contract.<sup>57</sup> It is unlikely to provide a helpful dividing line.<sup>58</sup> In this line of cases, nevertheless, one can see the Court grappling with the question of whether some behaviors that appear to extend the time and scope of the patent might be acceptable under patent principles and searching for a test that would involve some form of equitable balancing.

C. Aborted Attempts to Provide that Patent Misuse Requires a Violation of the Antitrust Laws.

In sum, through the early 1980s, courts defined patent misuse in terms of whether a patent holder had improperly extended the time or scope of the patent grant, a question which was to be answered according to patent principles. In 1986, however, the Federal Circuit reframed the test in antitrust terms. In *Windsurfing*, Chief Judge Markey of the Federal Circuit explained that to prove patent misuse, "the alleged infringer must show that the patentee has impermissibly broadened the 'physical or temporal scope' of the patent grant with anticompetitive effect" (emphasis added).<sup>59</sup> The Court explained further that the key inquiry in patent misuse should "reveal whether the overall effect of the behavior tends to restrain competition in an appropriately defined market".<sup>60</sup>

<sup>&</sup>lt;sup>57</sup> See id.

<sup>&</sup>lt;sup>58</sup> Lower courts are mixed on whether to extend the voluntariness inquiry to a related category of cases in which two patents are licensed for a fixed royalty and the patent holder continues to charge the same royalty after one of the patents has expired. See 1 HOVENKAMP & LEMLEY, supra note x, at § 3.3, p. 3-25 (describing these cases); 6 CHISUM, supra note x, at § 19.04[3][d], p. 19-476 (noting that these cases fall at the intersection of three lines of cases: mandatory package licenses, total-sales royalty structures;, and post-expiration royalties); compare Rocform v. Acitelli-Standard Concrete Wall, 367 F.2d 678 (6th Cir. 1966) (invalidating the agreement as an illegal extension of the patent grant) with Hull v. Brunswick, 704 F.2d 1195 (10<sup>th</sup> Cir. 1983) (agreement could remain in force as long as one patent continued unless the license the license is involuntary).

<sup>&</sup>lt;sup>59</sup> Windsurfing Int'l, Inc. v. AMF, Inc., 782 F.2d 995, 1001 (Fed. Cir. 1986). <sup>60</sup> See id. at 1001-1002.

With a few strokes of the pen, the Federal Circuit added a new requirement for patent misuse. To constitute misuse, a patent holder's behavior must not only extend the time or scope of the patent, it must also create anticompetitive effects. The Federal Circuit thereby turned from the Supreme Court's admonition to test patent misuse by patent policy, blending in a test based on antitrust doctrine.

In support of its language, the Federal Circuit cited a 1971 Supreme Court case, *Blonder-Tongue*. The Blonder-tongue case, however, does not contain *Windsurfing's* language or its test.<sup>61</sup>

The Federal Circuit in *Windsurfing* did try to avoid the foul line of defying Supreme Court doctrine. The *Windsurfing* Court suggested that one would only apply the antitrust analysis to behavior which the Supreme Court had not previously declared *per se* misuse.<sup>62</sup> This approach avoided appearing to overturn Supreme Court precedent but would impose a limitation on that precedent, in which prior Supreme Court cases would create precedent only for similar behaviors rather than establishing general rules of the doctrine of misuse.

This approach echoes per se analysis in antitrust law in which we generally apply per se analysis only when we have sufficient experience with a type of behavior to

<sup>&</sup>lt;sup>61</sup> See Robert J. Hoerner, *The Decline (And Fall?) of the Patent Misuse Doctrine in the Federal Circuit*, 69 ANTITRUST L.J. 669, 672-673 (2002) (noting that the citation of *Blonder-Tongue* after the words "with anticompetitive effect" could be regarded as misleading because the words did not appear in *Blonder-Tongue* but were an addition to the quotation by then-Chief Judge Markey); *See also* Patricia A. Marone & Richard M. Feustel, Jr., *The Patent Misuse Defense – Does it Still Have Viability?* PLI Series, Patent Copyright, Trademarks, & Literary Property Course Handbook (2002) (noting that the Federal Circuit in *Windsurfing* required antitrust-type findings of relevant market and anticompetitive effects to support a finding of an attempt to extend the scope of the monopoly, elements not required by existing case law including Supreme Court precedent).

<sup>&</sup>lt;sup>62</sup> See Windsurfing Int'l v. AMF Corp, 782 F.2d 994, 1001-02 (Fed. Cir. 1986).

predict that the conduct is almost always anticompetitive.<sup>63</sup> Thus, the Federal Circuit implied that the Supreme Court had not established general rules for patent misuse but merely indicated particular circumstances in which it had sufficient experience to declare that the behavior was most likely anticompetitive. Once again, the Federal Circuit borrowed from antitrust doctrine to limit patent misuse.

Within 9 months, however, Chief Judge Markey backed off from the position staked out in *Windsurfing*<sup>64</sup>, perhaps concerned at the boldness of appearing to limit Supreme Court precedent or perhaps for fear of the less than judicious implication that the Supreme Court did not have sufficient experience for the broad declarations it had made in the patent misuse area. In the *Senza-Gel* case, Chief Judge Markey retreated to the holding that patent misuse did not require antitrust type findings.<sup>65</sup> In contrast to the declarations in *Windsurfing*, Judge Markey confined his views to a footnote in which he deferred to Congress and the Supreme Court to make the changes attempted in *Windsurfing*.

Commentators and courts have questioned the rationale appearing in Supreme Court opinions dealing with misuse in view of recent economic theory and Supreme Court decisions in non-misuse contexts. See Windsurfing International v. AMR, Inc. 782 F.2d 995, 1001-02 n.9, 228 USPQ 562, 567 n.9 (Fed. Cir.

<sup>&</sup>lt;sup>63</sup> See Arizona v. Maricopa County Med. Soc'y, 457 U.S. 332, 344 (1982); see also Continental T.V., Inc. v. GTE Sylvania Inc., 433 U.S. 36, 50 n. 16 (1977).

<sup>&</sup>lt;sup>64</sup> See William J. Gilbreth & William H. Steinmetz, *The Patent MisuseDefense—Its Expansion and Contraction*, J. PROPRIETARY RIGHTS 7, 13 (1992) (noting the in *Senza-Gel*, the Federal Circuit thought better of its pronouncements in *Windsurfing*); Robert J. Hoerner, *The Decline (And Fall?) of the Patent Misuse Doctrine in the Federal Circuit*, 2002 ANTITRUST L.J. 669, 673 (2001) (same)

<sup>&</sup>lt;sup>65</sup> See Senza-Gel v. Seiffhart, 803 F.2d 661 (Fed. Cir. 1986). In *Senza-Gel*, the Federal Circuit confirmed as proper a lower court test for misuse in a tying context that did not require proof of market power or anticompetitive effects. Thus, the Federal Circuit upheld a summary judgment of misuse in favor of the defendant. On a charge of violation of antitrust laws, the court again upheld a lower court finding that the issue could not be resolved on summary judgment, and that the defendant would have to present further evidence of market power and anticompetitive effects. The rulings thereby emphasized the different requirements for patent misuse and antitrust.

1986), cert. denied, -- U.S. --, 106 S.Ct. 3276, 91 L.Ed.2d 565 (1986). We are bound, however, to adhere to existing Supreme Court guidance in the area until otherwise directed by Congress or by the Supreme Court.<sup>66</sup>

The *Windsurfing* case arose against the backdrop of a debate over whether to conform patent misuse to antitrust rules. Scholars and legislators weighed in on both sides of the debate,<sup>67</sup> with the Administration backing a proposal to test all patent misuse cases under antitrust standards.<sup>68</sup> For those in favor of conforming patent misuse to antitrust standards, arguments included that patent misuse provides a harsh sanction; that the misuse rules are too rigid for the economic realities of the marketplace; and that the more robust economic doctrines embodied in modern antitrust law would provide better guidance. As Judge Posner noted, "Our law is not rich in alternative concepts of monopolistic abuse."<sup>69</sup> For those opposed, arguments included that courts had shown sufficient flexibility in applying the patent misuse rules; that patent misuse serves as a valuable counter-weight to equitable doctrines that favor the patent holder; that technology markets, in which patents frequently operate, have characteristics distinct from other types of markets; and that the antitrust rules are notoriously difficult to

<sup>67</sup> Compare Competition Policy and the Patent Misuse Doctrine, Remarks by Roger B. Andewelt, Chief Intellectual Property Section, Antitrust Division Before the Bar Association for the District Of Columbia Patent, Trademark, and Copyright Section Nov. 3, 1982 *reprinted in* BNA's Patent, Trademark & Copyright Journal Vol. 25, p. 41 (1982); *and* USM Corp. v. SPS Tech. Inc., 694 F.2d 505, 511-12 (7<sup>th</sup> Cir. 1982) (arguing that misuse claims should be tested by conventional antitrust principles) *with* Prepared Statement of Louis Kaplow, Hearings on H.R. 557, April 30, 1987; *and* Robert P. Merges, *Reflections on Current Legislation Affecting Patent Misuse*, 70 J. PATENT & TRADEMARK OFF. Soc. 793 (1988).
<sup>68</sup> U.S. Depart of Justice, Office of Legislative and Intergovernmental Affairs, June 4, 1987, Justice Department Views, Senate Committee on the Judiciary Report on Process Patents Amendments Act of 1987 100<sup>th</sup> Cong. 1<sup>st</sup> Sess. At 67 (June 23, 1987) (reporting on bill embodying the approach passed by the Senate but not ultimately adopted).

<sup>&</sup>lt;sup>66</sup> Senza-Gel, 803 F.2d at 665 n.5.

<sup>&</sup>lt;sup>69</sup> See USM Corp. v. SPS Tech. Inc., 694 F.2d 505, 512 (7<sup>th</sup> Cir. 1982).

apply.<sup>70</sup> As one scholar commented, "[I]t is ironic indeed that advocates of greater certainty in the law of patent misuse would propose a unified rule of reason approach when this is arguably one of the least certain legal rules ever propounded."

In 1988, the Senate passed a bill that would have prohibited a finding of patent misuse unless the patent holder's "practices or actions or inactions . . . violate the antitrust laws."<sup>71</sup> In a cloakroom compromise in the waning days of the 100<sup>th</sup> Congress, however, the House and Senate reached agreement on a different version that is far less sweeping.<sup>72</sup> Rather than applying antitrust rules across the board to all of patent misuse, the final language relates only to tying. In the case of tying, the language prohibits a finding of misuse unless the patent holder has market power.<sup>73</sup>

Thus, following the '88 Act, the law of patent misuse for issues other than tying

stood as it had been before. In order to constitute misuse, a patent holder's behavior need

<sup>&</sup>lt;sup>70</sup> For arguments on both sides of the debate, see sources cited *supra* notes X & Y [the 2 notes preceding this]

<sup>&</sup>lt;sup>71</sup> Jere M. Webb & Lawrence A. Locke, *Intellectual Property Misuse: Developments in the Misuse Doctrine*, 4 HARV. J.L. TECH. 257, 264 (citing S. 428 § 201, 100<sup>th</sup> Cong., 2d Sess. 1988).

<sup>&</sup>lt;sup>72</sup> For a detailed description of the path of House and Senate versions and the final compromise language, see Kenneth J. Burchfiel, *Patent Misuse and Antitrust Reform: "Blessed be the Tie?"* 4 HARV. J.L. & TECH. 1, 2 n. 9 (1991); see also Webb & Locke, supra note x; Bennett, *Patent Misuse: Must an Alleged Infringer Prove an Antitrust Violation?* 17 A.I.P.L.A. Q.J. 1, (1989).

 $<sup>^{73}</sup>$  The relevant language prohibits a finding of misuse upon "condition[ing] the license of any rights to the patent or the sale of the patented product on the acquisition of a license to rights in another patent or purchase of a separate product, unless, in view of the circumstances, the patent owner has market power in the relevant market for the patent or patented product on which the license or sale is conditioned." *See* 35 U.S.C.A. § 271(d)(5) (West 2003).

The final bill also prohibits finding misuse for a complete refusal to license or use rights. This issue relates to suppression of an invention, and suppression is not the focus of the current article. For a discussion of the issue, see Kurt M. Saunders, *Patent Nonuse and the Role of Public Interest as a Deterrent to Technology* Suppression, 15 Harv. J. L. & Tech. 389 (2002); Seungwoo Son, *Selective Refusal to Sell Patented Goods: The Relationship Between Patent Rights and Antitrust Law*, 2002 J. L. Tech. & Policy 109 (2002); *see also See* 35 U.S.C.A. § 271(d)(4) (West 2003) ("No patent owner otherwise entitled to relief for infringement or contributory infringement of a patent shall be denied relief or deemed guilty of misuse or illegal extension of the patent right by reason of his having . . . refused to license or use any rights to the patent.").

not constitute an antitrust violation. Rather, analysis of patent holder behavior for the purposes of patent misuse must be derived from patent policy.

#### II. The Federal Circuit Casts Out in a New Direction

Over the next decade, the Federal Circuit would adopt a test bearing only passing resemblance to the law as it stood after the '88 Act. In particular, current Federal Circuit doctrine precludes a finding of patent misuse unless the patent holder has violated the antitrust laws.

The Federal Circuit doctrine is at odds with legislative and judicial precedents. Worse yet, the doctrine is convoluted and difficult to follow. To understand the path that has taken the Federal Circuit to this result, it is helpful to separate out three types of questions and to identify how patent and antitrust law address each. Although the line between the questions is not absolute, the failure to carefully navigate them has contributed to the current doctrinal confusion in patent misuse.

The questions are: 1) what harm is the law trying to identify; 2) what type of test will be used to identify it; and 3) what elements will be considered under the test. For example, the courts may choose to apply a balancing test to determine whether patent misuse has occurred. That does not, however, resolve the question of whether courts should use the antitrust version of the balancing test. More importantly, it does not resolve the question of whether the issues weighed in the balancing test should be antitrust issues.

#### A. Antitrust Doctrine

Antitrust answers each of the three questions in a particular fashion. At a most general level, antitrust law seeks to protect competition and prevent the improper use and creation of monopoly with its resultant anticompetitive effects in the marketplace.<sup>74</sup>

The basic antitrust test is a balancing test known as the rule of reason. It is not a simple balancing test, in which the court weighs issues on both sides and arrives at a considered judgment of what is fair and equitable under the totality of the circumstances. Rather, the antitrust balancing test has formal thresholds and elements.<sup>75</sup> These thresholds and elements are often burdensome to establish. In fact, the test is so difficult to satisfy that Judge Posner, no fan of the restrictions of antitrust law, has been cited as saying that the rule of reason is essentially a "euphemism for non-liability."<sup>76</sup>

The rule of reason considers certain elements to establish the improper use or creation of monopoly. Essentially, the test looks for market power, anticompetitive effects and proof that the anticompetitive effects outweigh the pro-competitive benefits.<sup>77</sup>

<sup>&</sup>lt;sup>74</sup> See, e.g., AREEDA & HOVENKAMP, *supra* note x, at ¶ 100a; *see* also IIEARL W. KINTNER, FEDERAL ANTITRUST LAW §11.1 (1980) (primary goal of Sherman Act §2 monopolization rule is to prevent a firm or group of firms from acquiring or maintaining monopoly power through abusive or inequitable practices). These terms are subject to considerable ambiguity, although they have developed particular meaning in the context of antitrust law. See id.

<sup>&</sup>lt;sup>75</sup> The classic treatise on antitrust describes the rule of reason as requiring a series of steps. First, the plaintiff has the initial burden of showing that the behavior restrains competition in a specific market. Second, it the plaintiff meets this initial burden, the burden shifts to the defendant to show that its behavior serves legitimate objectives. Third, if the defendant meets that burden, the plaintiff may show that the defendant could meet its objective using less restrictive alternatives. And finally, the court must weigh the harms and benefits of the restraint with the plaintiff bearing the burden to show that the restraint is unreasonable on balance. See 7 PHILIP E. AREEDA& HERBERT HOVENKAMP, ANTITRUST LAW ¶ 1502, at 345-46371-72 (2d ed. 20031986).

<sup>&</sup>lt;sup>76</sup> See Richard A. Posner, The Rule of Reason and the Economic Approach: Reflection on the Sylvania Decision, 45 U. CHI. L. REV. 1, 14 (1977); Testimony of Professor Louis Kaplow, Hearings Before the House Subcomm. Of the Judiciary on Monopolies and Commercial Law on H.R. 557, 100th Cong. 129 (1987) (citing the Posner language). <sup>77</sup> See note x, supra (describing the rule of reason test).

Given the burdensome nature of the rule of reason, courts have established a streamlined test when experience shows that the nature and effect of the test is so likely to be anticompetitive that it is unnecessary to examine the behavior in the particular circumstances of the case.<sup>78</sup> The per se test for tying in antitrust law is really a hybrid of this approach and the rule of reason. Although it is a streamlined test, it still requires some examination of particular circumstances and effects.<sup>79</sup>

## B. Blurring the Lines during the '88 Act Senate Debate

As described above, in the final language of the '88 Act, Congress changed only the patent misuse law relating to tying. Moreover, Congress changed the law by borrowing an element from the antitrust balancing test. In particular, Congress mandated that there can be no finding of misuse without market power.

Borrowing an element from the antitrust balancing test, however, is not the same as mandating the use of the entire antitrust test. In statements presented at the time that the final language was introduced, however, Senator DeConcini attempts to broaden the meaning of the language.

Senator DeConcini argues that "while not mandating an antitrust test, the legislation nonetheless imposes a rule-of-reason-type analysis" before a tie-in can be held to constitute misuse – and not just a general reasonable analysis, but one with a particular set of elements in mind."<sup>80</sup> Thus, rather than simply adding a market power requirement, Senator DeConcini argues that the final language replaces both the type of test to be

<sup>&</sup>lt;sup>78</sup> See National Soc'y of Prof;l Eng'rs v. United States, 435 U.S. 679, 692 (1978); Northwest Wholesale Stationers, Inc. v. Pacific Stationary & Printing Co., 472, U.S. 284, 298 91985).

<sup>&</sup>lt;sup>79</sup> See text accompanying note x, *supra* (describing the antitrust test for tying).

<sup>&</sup>lt;sup>80</sup> 134 CONG. REC. S17147 (daily ed. Oct. 21, 1988).

applied and all of the elements to be considered. Specifically, the DeConcini approach replaces the "reasonable" analysis of a general equitable inquiry with the type of balancing test applied in antitrust law plus all of the elements of the antitrust test.<sup>81</sup>

Senator Leahy, who had authored the language that the Senate originally approved, would also try to soften the impact of Congress's failure to pass his earlier language:

While this approach is indeed different from our original patent misuse proposal, it does not mean that Congress has rejected the earlier Senate proposal and now believes that the traditional misuse doctrine should be retained intact in the many other areas in which it may be applied by the courts. It only means that, because of the short time available at the end of this Congress, the House and Senate Committees interested in these issues were able to agree on a narrower reform.<sup>82</sup>

It is questionable whether the Supreme Court would find such a strained

interpretation of the language and precedent to be binding. As the Supreme Court noted

in INS v. Cardoza-Fonseca,

<sup>&</sup>lt;sup>81</sup> In theory, one could argue that the language of the act leaves open the possibility of adding other requirements for patent misuse. The argument would be that the Act merely requires a finding of market power for a misuse case involving tying; it does not say that market power is the sole element that can be required for a misuse case involving tying, and other elements could be added later by Congress or the Courts. Even if this were true, the language cannot be read as mandating specific elements.

One could also argue that the DeConcini interpretation would impose an even stricter test than was rejected by failure to pass the earlier Senate language. The original Senate language would have required that the behavior violate the antitrust laws. For tying to violate the antitrust laws, requires only a modified per se analysis, not a full blown rule of reason approach. Thus, Senator DeConcini's suggestion of a rule of reason analysis would impose a patent misuse test for tying that is *tougher* to meet than the antitrust test for tving.

The DeConcini language may be best understood as a struggle over whether to apply per se rather than rule of reason analysis to tying, both for patent and antitrust. Regardless of the underlying struggle, however, Senator DeConcini acknowledges clearly that the final language concerns only tying rather than patent misuse across the board. <sup>82</sup> See 134 CONG. REC. S17,147-48 (daily ed. Oct. 21, 1988).

Few principles of statutory construction are more compelling than the proposition that Congress does not intend *sub silentio* to enact statutory language that it has earlier discarded in favor of other language.<sup>83</sup>

The Federal Circuit, moreover, makes no reference at all to the Leahy and DeConcini statements. The same type of logical missteps, however, will plague the Federal Circuit's analysis of patent misuse across the board.

## C. Blurring the Lines in the Federal Circuit

Following the 1988 Act, if a patent holder engages in tying behavior, there can be no finding of misuse without a finding that the patent holder has market power. The law for other forms of patent misuse, however, remains unchanged.<sup>84</sup> In order to constitute misuse, a patent holder's behavior need not constitute an antitrust violation. Rather, analysis of patent holder behavior for the purposes of patent misuse must be derived from patent policy.

<sup>&</sup>lt;sup>83</sup> See INS v. Cardoza-Fonseca, 480 U.S. 421, 442-43 (1987) (quoting Nachman Corp. v. Pension Benefit Guaranty Corporation, 446 U.S. 359, 392-393 (1980) (Stewart, J., dissenting)); see also id. at 452-53 (Scalia, J. concurring) (arguing that judges interpret laws rather than reconstruct legislators' intentions; where the language of those laws is clear, we are not free to replace it with an unenacted legislative intent); U.S. v. Lanier, 520 U.S. 259, 268 (1997) (noting that the legislative intent of Congress is to be derived from the language and structure of the statute itself, if possible, not from the assertions of codifiers directly at odds with clear statutory language); cf. Grid System Corp. v. Texas Instruments, 771 F. Supp. 1033, 1037 n.2 (N.D. Cal. 1991) (declining the invitation to use the legislative history of the 1988 Act language to find that the Act altered antitrust law and noting that although some legislators did favor such an exception, a full reading of the record reveals that Congress rejected the extension despite this articulate support). But see In re Recombinant DNA, 850 F. Supp. 769, 777 (S.D. Ind. 1994) (referring to the Leahy language in interpreting the 1988 Act to cover both "tie-ins" and "tie-outs" and noting that Congress would not have fashioned a "rule-of-reason type" approach for one form of tying arrangement and excluded from that approach another intimately related tying situation, especially in light of its clear purpose of permitting a misuse defense only when the patentee has acted anticompetitivel); Texas Instruments Inc. v. Hyundai Electronics Industries, 49 F. Supp. 2d 893 (E.D. Tex. 1999) (following other portions of the Leahy language to support a full Rule of Reason analysis for patent misuse in tying).

<sup>&</sup>lt;sup>84</sup> As noted before, the '88 Act also codified a patent holder's right to suppress the invention. *See* note x, *supra*.

In the 1992 *Mallinckrodt v. Medipart* opinion, however, the Federal Circuit altered the law by requiring a full-blown antitrust analysis in a patent misuse case that did not relate to tying. Thus, the Court not only required more than market power but added this requirement to patent misuse across the board.<sup>85</sup>

The *Mallinckrodt* opinion cited *Windsurfing* as the relevant precedent for patent misuse. The opinion showed no awareness of Judge Markey's subsequent retreat from *Windsurfing* in *Senza-Gel*. Nor did the opinion show any awareness of Congress' failure to pass the Senate proposal which would have taken an approach similar to what was outlined in *Windsurfing*. Rather, the *Mallinckrodt* simply cited *Windsurfing* as the appropriate authority without acknowledging any of the intervening precedents.<sup>86</sup>

The *Windsurfing* test essentially follows the test for antitrust violations. As described above, antitrust seeks to protect competition and prevent anticompetitive effects in the marketplace. One can prove such harms in antitrust either by showing that the behavior has been declared a per se violation or that the behavior fails the rule of reason. Under the rule of reason, a court will look for market power, anticompetitive effects and proof that the anticompetitive effects outweigh the pro-competitive benefits.

Under *Windsurfing*, patent misuse "requires that the alleged infringer show that the patentee has impermissibly broadened the 'physical or temporal scope' of the patent

<sup>&</sup>lt;sup>85</sup> See Mallinckrodt, Inc. v. Medipart, Inc., 976 F.2d 700 (Fed. Cir. 1992).

<sup>&</sup>lt;sup>86</sup> One could argue that the *Mallinckrodt* court was aware of the precedents after *Windsurfing* but chose to ignore them on the theory that these precedents related only to tying. Indeed, the *Mallinckrodt* court did note that it was not faced with a tying case and that therefore certain tying precedents did not apply.

<sup>[</sup>t]he district court cited the price-fixing and tying cases as reflecting what the court deemed to be the correct policy, viz., that no condition can be placed on the sale of patented goods, for any reason. However, this is not a price-fixing or tying case, and the per se antitrust and misuse violations found in the Bauer trilogy and Motion Picture Patents are not present here.

Mallinckrodt, 976 F.2d at 708. The lower court, however, did not refer to *Senza-Gel* or the '88 Act, but cited only early cases such as Motion Picture Patents. Moreover, as described above, *Senza-Gel* and the rejected Senate proposal create negative authority for expanding an antitrust approach beyond tying. It seems surprising that a court, if aware of such precedent, would dismiss it without discussion.

grant with anticompetitive effect.<sup>\*\*87</sup> To sustain a misuse defense, a party must show that the behavior has been held to be per se anticompetitive by the Supreme Court or demonstrate that "the overall effect of the license tends to restrain competition unlawfully in an appropriately defined relevant market.<sup>\*\*\*</sup> In applying the balancing test, the court noted with approval the pro-competitive effects related to the behavior.

In sum, the harm that patent misuse is testing for becomes focused on improper "anticompetitive effects." One can prove such effects either by reference to behaviors declared per se prohibited or by a balancing test that looks for market power, and anticompetitive effects evaluated on balance against pro-competitive effects.

Thus, the *Windsurfing* court drafted a test in which the patent law inquiry would be replaced by an antitrust inquiry. *Mallinckrodt* adopts this test, amplifying it slightly by focusing on the familiar notion of behavior falling inside or outside the patent grant. According to *Mallinckrodt*, the question of whether a patent holder's behavior falls outside the scope of the patent turns on anticompetitive effects, which are measured by the antitrust rule of reason.<sup>89</sup>

Federal Circuit cases after *Mallinckrodt* would show greater loyalty to the history of patent misuse as a doctrine separate from antitrust that does not require a violation of

 <sup>&</sup>lt;sup>87</sup> Windsurfing International, Inc. v. AMF International, Inc., 782 F.2d 995 (Fed. Cir. 1986).
 <sup>88</sup> See id.

<sup>&</sup>lt;sup>89</sup> The *Mallinckrodt* opinion states:

The appropriate criterion is whether Mallinckrodt's restriction is reasonably within the patent grant, or whether the patentee has ventured beyond the patent grant and into behavior having an anticompetitive effect not justifiable under the rule of reason.

*See* Mallinckrodt, 976 F.2d at 708. In addition, in the next paragraph, the Court stresses the dichotomy between inside and outside the patent grant, again implying that the difference rests on whether there are anticompetitive effects.

Should the restriction be found to be reasonably within the patent grant. . . that ends the inquiry. However, should such inquiry lead to the conclusion that there are anticompetitive effects extending beyond the patentee's statutory right to exclude the court will apply the rule of reason.

the antitrust laws. For example, the *Virginia Panel* opinion would note that "violation of the antitrust laws . . . requires more exacting proof than suffices to demonstrate patent misuse."<sup>90</sup> In addition, the *C.R. Bard* opinion would note the following:

Patent misuse is viewed as a broader wrong than antitrust violation because of the

economic power that may be derived from the patentee's right to exclude. Thus

misuse may arise when the conditions of antitrust violation are not met.<sup>91</sup>

Despite the declarations, the opinions begin with the mantra that patent misuse does not

require a violation of the antitrust laws and then essentially proceed to apply the test for

antitrust violations.92

Federal Circuit cases after *Mallinckrodt* also would expand the explanation of the

misuse test to include references to other misuse precedents, including the language of

the '88 Act and the *Brulotte* reasonableness inquiry.<sup>93</sup> None of the cases, however,

<sup>93</sup> See text accompanying notes x-y, *supra* (describing the line of cases that includes *Brulotte* and *Radio 1*);
B. Braun Medical, Inc. v. Abbott Labs, 124 F.3d 1419, 1426 (Fed. Cir. 1997) (referencing § 271(d)(5) of the Patent Act which embodies the '88 Act amendments related to tying); Virginia Panel Corp. v. Mac Panel Co., 133 F.3d 860, 869 (Fed. Cir. 1997) (referencing § 271(d)(5) as well as *Brulotte*).

Two of the Federal Circuit misuse cases following *Mallinckrodt* do include citations to *Senza-Gel*, but in reference to issues unrelated to the court's retreat from the position that the misuse inquiry should be replaced with an antitrust inquiry. *See* C.R. Bard, 157 F.3d at 1372 (*Senza-Gel* cited for the proposition that patent misuse renders a patent unenforceable); In order to constitute misuse, a patent holder's behavior need not constitute an antitrust violation. Rather, analysis of patent holder behavior for the purposes of patent misuse must be derived from patent policy; B. Braun Medical, 124 F.3d at 1427, 1428 n.5 (*Senza-Gel* cited for two propositions: 1) that patent misuse is an equitable doctrine in which the court refuses to

<sup>&</sup>lt;sup>90</sup> See Virginia Panel Corp. v. Mac Panel Co., 133 F.3d 860, 872 n. 19 (Fed. Cir. 1997); *cf.* B. Braun Medical, Inc. v. Abbott Labs, 124 F.3d 1419, 1426 (Fed. Cir. 1997) (patent misuse is a separate method of limiting abuse of patent rights separate from the antitrust laws).

<sup>&</sup>lt;sup>91</sup> C.R. Bard, Inc. v. M3 Systems, Inc. 157 F.3d 1340, 1372 (Fed. Cir. 1998) (opinion written by judge who also wrote the *Mallinckrodt* opinion).

<sup>&</sup>lt;sup>92</sup> One could argue that, despite the essential application of an antitrust test, the *Mallinckrodt* Court still offers a hint that it might not intend to apply antitrust law. In the background section of the opinion, the *Mallinckrodt* judge notes that "[t]he concept of patent misuse arose to restrain practices that did not in themselves violate any law." *See* Mallinckrodt, 976 F.2d at 704. In theory, if the sentence says patent misuse is aimed at practices that don't violate any laws, perhaps the test for patent misuse should require something less than what is required for a violation of the antitrust laws. The remainder of the opinion, however, directly applies *Windsurfing* which replaces patent misuse with an antitrust test. Thus, either the *Mallinckrodt* court misunderstood that *Windsurfing* overturned prior precedent in the area or the background sentence is merely a historic reference, too vague to mean much of anything.

would show any awareness that *Windsurfing* represented a departure from prior precedent, that the court retreated from the position in *Senza-Gel*, or that the Senate failed to pass a proposal similar to *Windsurfing* in the shuffle leading up to the '88 Act.<sup>94</sup>

In later Federal Circuit cases, the test laid out in *Windsurfing* and adopted in *Mallinckrodt* becomes clouded and difficult to follow. This may reflect an attempt to apply antitrust in patent misuse cases with due deference to precedents not described in *Mallinckrodt*. It may also reflect a lack of clarity in applying antitrust law.

For example, as described above, the harm to be tested for under *Windsurfing* focuses on improper "anticompetitive effects." One can prove such effects either by 1) behaviors declared per se prohibited or 2) applying the rule of reason, a test that looks for market power, anticompetitive effects, and finally, a balancing of anticompetitive effects against pro-competitive effects.

One could argue that the Federal Circuit approach follows the approach outlined in the statement by Senator DeConcini. Both tests mimic the form and substance of the antitrust laws. Even if one accepts the questionable proposition that the DeConcini statement is good authority, however, it is not good authority for the path taken by the Federal Circuit. The DeConcini statement refers only to the test for tying. It does not establish a general test for misuse, as the Federal Circuit does. In addition, one would also have to accept the slight of hand that the Federal Circuit has not cited or explored the Leahy/DeConcini statements as potential authority.

help support the rights of a party with unclean hands; and 2) that actions that support a misuse finding may also provide an element in a claim for affirmative actions under an antitrust or breach of contract theory).

One could argue that the Federal Circuit approach follows the approach outlined in the statement by Senator DeConcini. Both tests mimic the form and substance of the antitrust laws. Even if one accepts the questionable proposition that the DeConcini statement is good authority, however, it is not good authority for the path taken by the Federal Circuit. The DeConcini statement refers only to the test for tying. It does not establish a general test for misuse, as the Federal Circuit does. In addition, one would also have to accept the slight of hand that the Federal Circuit has not cited or explored the Leahy/DeConcini statements as potential authority.

<sup>&</sup>lt;sup>94</sup> Two of the Federal Circuit misuse cases following *Mallinckrodt* do include citations to *Senza-Gel*, but in reference to issues unrelated to the court's retreat from the position that the misuse inquiry should be replaced with an antitrust inquiry. *See* C.R. Bard, 157 F.3d at 1372 (*Senza-Gel* cited for the proposition that patent misuse renders a patent unenforceable); In order to constitute misuse, a patent holder's behavior need not constitute an antitrust violation. Rather, analysis of patent holder behavior for the purposes of patent misuse must be derived from patent policy; B. Braun Medical, 124 F.3d at 1427, 1428 n.5 (*Senza-Gel* cited for two propositions: 1) that patent misuse is an equitable doctrine in which the court refuses to help support the rights of a party with unclean hands; and 2) that actions that support a misuse finding may also provide an element in a claim for affirmative actions under an antitrust or breach of contract theory).

At times, Federal Circuit opinions use the term "rule of reason" properly to

describe the full test that is applied in lieu of a per se test.<sup>95</sup> At other times, however, the

Court uses the term "rule of reason" to refer only to the balancing portion of the test.<sup>96</sup>

This confusion makes it difficult to determine what the Federal Circuit test is and how it

should be applied.<sup>97</sup>

In addition, Federal Circuit language at times suggests that the Court will apply a

two-part test in which it would first determine whether the behavior violates patent policy

<sup>&</sup>lt;sup>95</sup> For example, at one point, the Court in *B. Braun* describes patent misuse as either identifying behavior that falls within per se prohibitions or applying the rule of reason. Although the language is unclear, it essentially follows the per se/rule of reason split applied in antitrust:

Two common examples of such impermissible broadening are using a patent which enjoys market power in the relevant market to restrain competition in an unpatented product or employing the patent beyond its 17-year term. In contrast, field of use restrictions . . . are generally upheld and any anticompetitive effects they may cause are reviewed in accordance with the rule of reason.

*See* B. Braun, 124 F.3d at 1426 (citations omitted). Although classic per se tests generally exclude market power inquiries, the fact that the Court includes tying + market power as one of the per se categories is consistent with the way that antitrust law handles tying. *See* text accompanying notes x-y, *supra*. <sup>96</sup> For example, the *Virginia Panel* court describes the misuse test for circumstances outside the realm of per se as a multi-part test in which a court must first determine if the practice is reasonably within the patent grant. If not, and if it extends beyond the grant with anticompetitive effect, then the court will apply the "rule of reason." *See* Virginia Panel, 133 F.3d at 869. Thus, the court describes the rule of reason as entering after a finding that there are anticompetitive effects, even though a finding of anticompetitive effects is part of the rule of reason itself.

*Mallinckrodt* uses a similar formulation to describe the test for those behaviors that are not per se patent misuse.

Should the restriction be found to be reasonably within the patent grant . . . that ends the inquiry. However, should such inquiry lead to the conclusion that there are anticompetitive effects extending beyond the patentee's statutory right to exclude, these effects do not automatically impeach the restriction. Anticompetitive effects that are not per se violations of law are reviewed in accordance with the rule of reason.

Mallinckrodt, 976 F. 2d at 708. Once again, the court has already applied parts of the rule of reason test before the point at which it would begin applying the test.

In addition, the *Mallinckrodt* language cited above suggests an odd formulation of per se rules on the whole. It suggests that one asks first whether there are anticompetitive effects and then categorizes some of those effects as per se prohibited. Although the per se rule in tying does include some consideration of effects, the more general approach for a per se rule eschews any consideration of effects and declares some behavior so likely to cause harm that it is prohibited without an inquiry into details such as the effects in the particular case. *See* text accompanying notes x-y, *supra*.

<sup>&</sup>lt;sup>97</sup> It is also possible to argue that the Federal Circuit test is not a confusion of antitrust law. Rather, the Federal Circuit judges simply do not intend to apply antitrust law and have invented their own doctrinal forms. If that is the case, it is a strange doctrine indeed, given that it uses the language and concepts of antitrust law, citing antitrust cases for support. *See, e.g.*, Virginia Panel, 133 F.3d at 869 (describing the rule of reason test to be applied in patent misuse by quoting antitrust cases). Moreover, it fails to follow patent doctrine.

and then determine whether the behavior violates antitrust.<sup>98</sup> In other words, rather than replacing the patent inquiry with the more familiar antitrust-style inquiry, the two-part test would require both inquiries. A defendant would have to show a patent violation *and* an antitrust violation.

Finally, the doctrinal confusion is worsened by intermingling the word

"reasonable," as in a general balancing test like the one suggested in Radio 1, with the

term "rule of reason," which describes a structured test in which there are specific

elements to apply and those elements track antitrust theory.<sup>99</sup>

An additional danger of the doctrinal confusion in patent misuse is that it may

bleed over into antitrust law as courts and commentators cite patent misuse cases for a

<sup>&</sup>lt;sup>98</sup> For example, the *Virginia Panel* court describes the misuse test in the following manner:

When a practice alleged to constitute patent misuse is neither per se patent misuse nor specifically excluded from a misuse analysis . . . a court must determine if that practice is "reasonably within the patent grant . . . . If so, the practice does not have the effect of broadening the scope of the patent claims and thus cannot constitute patent misuse. If, on the other had, the practice has the effect of extending the patentee's statutory rights and does so with an anti-competitive effect, that practice must then be analyzed in accordance with the "rule of reason." Under the rule of reason, "the finder of fact must decide whether the questioned practice imposes an unreasonable restraint on competition, taking into account a variety of factors, including specific information about the relevant business, its condition before and after the restraint was imposed, and the restraint's history, nature, and effect."

*See* Virginia Panel, 133 F.3d at 869 (citations omitted). *See also*, Mallinckrodt, 976 F.2d at 708 (using a similar formulation). Thus, the test could be read as first applying a *Radio 1* style reasonableness inquiry in which the court asks whether the restraint is unreasonable under patent principles, and then an antitrust inquiry, which focuses on anticompetitive effects under the rule of reason.

The language may be no more than an imperfect articulation of *Windsurfing* or an attempt to make *Windsurfing* fit within the notion that patent law tests for something different from antitrust. It may, therefore, suggest some of the difficulties of applying *Windsurfing* without a clear mandate to adopt antitrust law.

Nevertheless, one district court case has interpreted the current Federal Circuit rule as a two-step rule requiring first a *Radio 1* style inquiry into whether the behavior extends the patent grant and then a rule of reason analysis. *See* text accompanying notes x-y, *infra* (describing Bayer AG v. Housey Pharmaceuticals, Inc. 228 F.Supp.2d 467, 467 (D. Del. 2002)).

<sup>&</sup>lt;sup>99</sup> See, e.g., Mallinckrodt and Virginia Panel language cited in note x, supra. In addition, the C.R. Bard Court explains that the patent holder's competitive activities would constitute patent misuse if there were evidence that they "were either per se patent misuse or that they were not "reasonably within the patent grant." See C.R. Bard, 157 F.3d at 1373. The court never uses the term "rule of reason" at all, but it would be hard to imagine that the author of Mallinckrodt would have completely abandoned that standard without any reference to the Federal Circuit cases that have relied on it. More likely, the C.R. Bard language is intended to suggest a dichotomy between a per se approach and a rule of reason approach but ends up using the language of open balancing rather than the language of the structured rule of reason test.

description of what the rule of reason is or what an inquiry into anticompetitive effect should look like. Thus, if the Federal Circuit is going to apply what is essentially antitrust law, it would be better to ensure that it is applied clearly and properly, even if the approach is cut back to applying antitrust only in the tying arena. <sup>100</sup>

In sum, the journey to the current Federal Circuit doctrine can be understood in the following fashion: The Federal Circuit in *Windsurfing* tries to change patent misuse doctrine so that it tracks antitrust doctrine. It then retreats from this approach in *Senza-Gel*. Similarly, Congress considers changing patent misuse so that it tracks antitrust doctrine to require finding an antitrust violation. Congress rejects this approach, however, adopting a provision relating to tying and mandating only market power. Four years later, the Federal Circuit, ignoring or perhaps missing the implication of the intervening precedents, cites and tries to adopt the *Windsurfing* test. Later Federal Circuit cases try to conform the new Circuit doctrine to the intervening precedents. The result is a confusing tangle that distorts both antitrust and misuse doctrine.

## III. Should Patent Misuse Require A Violation of the Antitrust Laws?

<sup>&</sup>lt;sup>100</sup> In addition, some commentators have expressed concern that the Federal Circuit may be exercising too much influence in the antitrust realm without sufficient leavening effect from the viewpoints of other circuits. In particular, under Federal Circuit law, it has jurisdiction to hear appeals from cases that included at least one patent claim at the trial court level, even if no patent issues remain on appeal. Until recently, the Federal Circuit then applied regional circuit law to non-patent claims. The Federal Circuit, however, has changed this approach such that it now applies its own law to non-patent claims, which would include antitrust claims. *See* Ronald Katz & Adam J. Safer, *Should One patent Court Be Making Antitrust Law for the Whole Country*? 69 ANTITRUST L.J. 687, 687-88 (describing and criticizing the expansion of the Federal Circuit's reach); Robert Pitofsky, *Challenges of the New Economy: issues at the Intersection of Antitrust and Intellectual Property*, 68 ANTITRUST L.J. 913, 919 (2001) (article by former Chairman of the Federal Trade Commission expressing concern that recent Federal Circuit cases have upset the traditional balance between antitrust and intellectual property with disturbing implications for the future of antitrust in technology industries); Boyle et al, *supra* note x, at 739 (noting that the Federal Circuit has taken on a new and controversial role).
The confusion in the Federal Circuit's doctrine could be greatly clarified by simply giving the Court a mandate to require an antitrust violation in testing for patent misuse. This would defy both legislative and judicial precedent – not just the retreat in *Senza-Gel* and the rejected senate proposal, but also the early doctrinal and theoretical history of patent misuse. The question remains, however, whether a clear mandate to require an antitrust violation would be the correct path.

This section argues that requiring an antitrust violation for a finding of patent misuse would be a mistake. Although the goals and policies of patent misuse and antitrust overlap, they are not the same in all areas. The clearest example of the clash is extensions of the length of the patent grant. Patent misuse generally is described as an impermissible attempt to broaden the patent grant, either by expanding the scope of the patent or extending the length of the grant.<sup>101</sup> Extensions of time, however, are a perfect example of how antitrust principles could lead to the wrong result under patent principles.

Consider a streamlined version of the *Windsurfing* test, one that would clearly test patent misuse by conventional antitrust principles. Such a test might define patent misuse as broadening the physical or temporal scope of the patent with effects that are, on balance, anticompetitive.<sup>102</sup> This can be proven by showing that the behavior falls within

<sup>&</sup>lt;sup>101</sup> Windsurfing Int'l, Inc. v. AMF, Inc., 782 F.2d 995, 1001 (Fed.Cir.1986) (patent misuse when "patentee has impermissibly broadened the 'physical or temporal scope' of the patent grant with anticompetitive effect."). Note that this general formulation excludes the words "with anticompetitive effect" added by *Windsurfing* and followed by *Mallinckrodt* and its progeny.

<sup>&</sup>lt;sup>102</sup> Note that I have shifted the emphasis in the *Windsurfing* language by changing the test from "broaden[ing] the physical or temporal scope . . . with anticompetitive effects" to "broadening the physical or temporal scope . . . with effects that are, on balance, anticompetitive." *Compare* Windsurfing International, Inc. v. AMF International, Inc., 782 F.2d 995, 1001 (Fed. Cir. 1986) *with* text accompanying this note. Under an antitrust test, one would not forbid <u>any</u> anticompetitive effects but only those that are on balance anticompetitive when weighed against pro-competitive effects. *See* text accompanying notes x-y, *supra*. Thus, the formulation above would conform more precisely to an antirust inquiry. In addition, although *Windsurfing, Mallinckrodt*, and the later Federal Circuit cases describe the overview of the test as if any anticompetitive effects would suffice, more expansive descriptions later in these opinions suggest that the courts actually are looking for anticompetitive effects on balance. *See* Windsurfing, 782 F.2d at

categories that are per se prohibited or by applying the rule of reason, which looks for market power, anticompetitive effects, and a balancing of such anticompetitive effects against any pro-competitive effects.

In a rule of reason inquiry under antitrust principles, a firm must have market power in order to create any anticompetitive effects. Without market power, a firm cannot raise prices and restrict output, thereby causing the type of anticompetitive effects that antitrust law cares about.<sup>103</sup>

A patent holder theoretically has power over the market represented by those who might be interested in the patented invention. A patent grant, however, is no guarantee that anyone will be interested in the product. In fact, 80% to 90% of patents never create any monetary return for the patent holder.<sup>104</sup> More importantly, the patented invention

<sup>1001-02 (</sup>assertion of trademark rights can have pro-competitive effects and thus would rarely form the basis of patent misuse); *see also* Mallinckrodt, 976 F.2d at 708 (anticompetitive effects do not automatically impeach the restriction but are reviewed under the rule of reason); Virginia Panel, 133 F.3d at 869 (if practice extends rights and does so with anticompetitive effects, it must be tested under the rule of reason).

<sup>&</sup>lt;sup>103</sup> 2a PHILLIP E. AREEDA, HERBERT HOVENKAMP & JOHN L. SALOW, ANTITRUST LAW ¶ 501, at 90 (2d ed. 2002) ("The substantial market power that concerns antitrust law arises when the defendant (1) can profitably set prices well above its costs and (2) enjoys some protection against a rival's entry or expansion that would erode such supracompetitive prices and profits."); LAWRENCE A. SULLIVAN & WARREN S. GRIMES, THE LAW OF ANTITRUST § 2.1, at 21 (2000) ("Antitrust is concerned with the power of market participants to distort the competitive process . . . without power, a market participant can do none of these things, but is, instead, itself subject to the discipline of competition. . . . [market power] is a prerequisite for finding an antitrust violation."). *But see* Thomas G. Krattenmaker and Steven C. Salop, *Anticompetitive Exclusion: Raising Rivals' Costs to Achieve Power over Price*, 96 YALE L.J. 209, 251 (1986) ("A firm need not enjoy or acquire traditional market power to gain the ability to price above pre-exclusionary-rights competitive levels. The strategy requires only barriers to entry and expansion in the output market to succeed.").

The ability to raise prices and restrict output is a difficult element to measure. Thus, courts use market share as a proxy for market power. See 2A PHILLIP E. AREEDA ET AL., ANTITRUST LAW, at 82 supra  $\P$  423 (2d ed. 2002); see also id. at 319  $\P$  801 (noting that although one cannot be too categorical, market shares exceeding 75% are sufficient to show market power while market shares below 50% are insufficient).

<sup>&</sup>lt;sup>104</sup> Machlup, *supra* note x, at 12; *see also* HERBERT HOVENKAMP, ECONOMICS AND FEDERAL ANTITRUST LAW § 8.3, at 219 (1985) ("Many patents confer absolutely no market power on their owners . . . . The economic case for 'presuming' sufficient market power . . . is very weak."); Nat'l Inst. on Indus. & Intellectual Prop., <u>The Value of Patents and Other Legally Protected Commercial Rights, 53</u> <u>ANTITRUST L.J. 535, 547 (1985)</u> ("Statistical studies suggest that the vast majority of all patents confer very little monopoly power."); Note, <u>The Presumption of Economic Power for Patented and Copyrighted</u>

may be only one of many approaches available. If sufficient substitutes exist, the patent holder may hold little or no power in a properly defined market. In short, although a patent, in theory, could convey monopoly power, it does not necessarily convey market power and it many cases, it will not.<sup>105</sup>

Where no market power exists, antitrust would be unconcerned by any extensions of time. Antitrust also would be unconcerned if the anticompetitive effects of the time extension were outweighed by pro-competitive effects. This would be understandable given that antitrust is only concerned with certain types of effects in the marketplace.

Under the logic of the patent system, however, we limit the length of a patent, not just to avoid anticompetitive effects, the way those words are defined under antitrust law, but for other economic reasons as well. As Posner has pointed out, a key reason we limit the length of a patent is to minimize the duplicative activity that would otherwise result from the fact that we have a patent system and the way in which our patent system is designed.<sup>106</sup> Thus, we would forbid an activity that extends the length of a patent grant

Products in Tying Arrangements, 85 COLUM. L. REV. 1140, 1156 (1985) (authored by William Montgomery) ("More often than not, however, a patent or copyright provides little, if any, market power."); A.I. Root Co. v. Computer/Dynamics, Inc., 806 F.2d 673, 676 (6th Cir. 1986) (Court "reject[ed] any absolute presumption of market power for copyright or patented product); USM Corp. v. SPS Tech. Inc., 694 F.2d 505, 511-12 (7<sup>th</sup> Cir. 1982) (noting that not all patents confer market power).

<sup>&</sup>lt;sup>105</sup> The fact that a patent does not necessarily convey market power is now commonly accepted by scholars, although the case law is less clear. *See, e.g.*, Jefferson Parish Hosp. Dist. No. 2 v. Hyde, 466 U.S. 2, 37 n. 7 (1984) ("A common misconception has been that a patent ... suffice[s] to demonstrate market power.... [A] patent holder has no market power in any relevant sense if there are close substitutes for the patented product."); Northern Pacific Ry. Co. v. United States, 356 U.S. 1, 10 n. 8, (1958) ("Of course it is common knowledge that a patent does not always confer market power over a particular commodity. Often the patent is limited to a unique form or improvement of the product and the economic power resulting from the patent privileges is slight."); C.R. Bard, Inc. v. M3 Systems, Inc., 157 F.3d 1340, 1368 (Fed. Cir. 1998) (noting that courts will not presume that the patent holder's right to exclude necessarily establishes market power in antitrust terms); ABA Section of Antitrust Law, THE 1995 FEDERAL ANTITRUST GUIDELINES FOR THE LICENSING OF INTELLECTUAL PROPERTY: COMMENTARY AND TEXT 17 (hereinafter "FTC/DOJ GUIDELINES ") (explaining that an important corollary to the guidelines published jointly by the FTC and DOJ is that intellectual property rights are not presumed to confer market power although noting that the case law is unclear).

<sup>&</sup>lt;sup>106</sup> See RICHARD A. POSNER, ECONOMIC ANALYSIS OF LAW 43 (5<sup>th</sup> Ed. 1998).

even if that extension would not be problematic in ways that the antitrust laws would recognize.

The patent system is designed to "promote the progress of science and the useful arts" by securing rewards to inventors.<sup>107</sup> The goal of the system is to maximize the products and inventions revealed to society.<sup>108</sup> Thus, as part of the essential trade-off of patent law, an inventor receives patent rights for a limited time in exchange for fully disclosing the invention in a way that would teach one of ordinary skill in the art how to practice the invention.<sup>109</sup>

Although the patent system encourages innovation, it can have less desirable

effects as well, including encouraging wasteful or duplicative activity. For example, the patent system encourages duplicative activity as parties try to invent around patents held by others rather than simply building on that work.<sup>110</sup> In addition, the patent system encourages defensive research activity, in which a patent holder tries to anticipate all

<sup>109</sup> 35 U.S.C. § 112 (2003) ("The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention."). <sup>110</sup> See Machlup, supra note x, at 50-51; RICHARD A. POSNER, ECONOMIC ANALYSIS OF LAW 38-39 (4th ed. 1992); PHILLIP AREEDA & LOUIS KAPLOW, ANTITRUST ANALYSIS: PROBLEMS, TEXT, CASES 151 (5th ed. 1997) ("The [patent system] may induce 'wasteful' research. Rivals of the patentee may have to invent around the product. While useful discoveries sometimes result, inventing around does not always seek better technology and may only produce an equivalent or inferior alternative to overcome a roadblock posed by the initial patent."); Louis Kaplow, The Patent-Antitrust Intersection: A Reappraisal, 97 HARV. L. REV. 1813, 1870 (1984) (noting that because inventing around does not contribute to welfare when combinations are permitted, the resources devoted to the task are entirely wasted); Donald F. Turner, The Patent System and Competitive Policy, 44 N.Y.U. L. REV. 450, 455 (1969) (noting that the patent system often leads competitors of patent holders to invest resources in duplicating research to find noninfringing ways of obtaining the same or nearly same result., using resources that in many instances could be put to better use in attacking problems as yet unsolved).

<sup>&</sup>lt;sup>107</sup> See U.S. Const. art. I, § 8, cl. 8 ; John Bates Clark described the patent system in the following manner: The Inventor in any civilized state is given an exclusive right to make and sell an economical appliance for a term of years that is long enough to pay him for perfecting it and to pay others for introducing it.

JOHN BATES CLARK, ESSENTIALS OF ECONOMIC THEORY 360 (1927).

<sup>&</sup>lt;sup>108</sup> Sinclair & Carroll Co. v. Interchemical Corp., 325 U.S. 327, 330-31 (1945) ("The primary purpose of our patent system is not reward of the individual but the advancement of the arts and sciences. Its inducement is directed to disclosure of advances in knowledge which will be beneficial to society; it is not a certificate of merit, but an incentive to disclosure.").

possible alternative solutions to the problem solved by the patent, even inferior solutions. The patent holder then tries to patent the alternatives to block competitors' efforts to invent around the patent.<sup>111</sup>

Finally, some scholars have questioned whether the rewards offered by the patent system distort the deployment of talent and economic activity into research, and more specifically, research that is likely to yield patentable results.<sup>112</sup> Distorted allocations are unlikely to reflect the most natural and efficient flow of resources.

In sum, limiting the length of the patent grant strikes a number of balances. Of particular relevance here, it limits the overall wasteful and duplicative activity that would result from the design and existence of the patent system.<sup>113</sup>

<sup>112</sup> See Machlup, supra note x, at 49-50; see also FRED WARSHOFSKY, THE PATENT WARS: THE BATTLE TO OWN THE WORLD'S TECHNOLOGY 246 (1994) (bemoaning the large amounts of time and energy that talented R&D staff must diverted to the task of assisting patent attorneys in filling the 'patentability gap,' rather than devising new products or new and more efficient processes for their manufacture).
<sup>113</sup> Cf. Robert Merges & Richard Nelson, On the Complex Economics of Patent Scope, 90 COLUM L. REV. 839, 871 (1990) (noting that where inventions is rivalrous, the process leading to invention is itself inefficient).

Some commentators suggest that economic loss from duplicative activity must be balanced against any gain from accidental discovery that may occur in the process of inventing around another's patent. Machlup describes this theory but also queries whether it is "easier to find the important by seeking the unimportant". *See* Machlup, *supra*, note x, at 52.

The problem of duplicative activity may be enhanced by other design elements of U.S. patent law, such as combining a winner-takes-all system with a system that grants a reward only after the invention has been sufficiently developed and reduced to practice. Given that parties know of the patent system and have an incentive to race to the patent goal, granting the patent later in the process increases the economic waste that occurs when the one who loses the race ends up with nothing to show for the effort. *Cf.* Steve Calandrillo, *An Economic Analysis of Intellectual Property Rights*, 9 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 301 (1998) (arguing that rewards earlier in the development process would minimize the loss from duplicative efforts in the race to patent by reducing the wasted effort of the loser); Machlup, *supra* note x, at 51 (noting the economic waste when the entity that loses the patent race is barred from using its own invention).

<sup>&</sup>lt;sup>111</sup> Machlup notes the following:

Although devised to solve an important incentive problem, the patent system is a crude and imperfect instrument. . . . The [patent] protection provided is often weak because there can be many viable solutions to a technical problem, so other firms can "invent around" a given patented solution. . . . To be sure, companies often seek to fence in their technological domain by patenting every conceivable variation on a product or process.

*See* Machlup, *supra* note x, at 50-51; *see also* F.M. SCHERER & DAVID ROSS, INDUSTRIAL MARKET STRUCTURE AND ECONOMIC PERFORMANCE 624 (3d ed. 1990).

Limiting potential anticompetitive effects from the right to exclude is certainly one of the reasons to limit the length of the patent grant. For example, Machlup notes that "'[1]ive patents' may obstruct inventive or innovative activity long after their owners have decided not to use the inventions covered".<sup>114</sup> It is not, however, the only issue for patent policy. As a result, following antitrust tests and principles could lead to an improper result.

The notion that it would be problematic to test time extensions solely by antitrust principles has intuitive appeal as well. If that were the rule, we would simply tell patent holders to choose how long they would like to hold their patent. Any extension would be fine, until it results in full-blown anticompetitive market effects as defined by the antitrust laws, at which point we will decline to enforce it. It would seem quite strange that we grant a patent for 20 years, but we really mean 20 years plus as long as you stay below the radar screen of the antitrust laws.

Thus, under a patent analysis, we may forbid an activity that extends the length of a patent grant even if that extension does not create the type of anticompetitive effects that antitrust law would recognize. Limiting the inquiry to behavior that violates antitrust law ignores significant issues for patent policy.

## IV. Reach-Through Royalties: The Problem Applied in a Modern Setting

As described above, applying antitrust principles to practices that have the effect of extending the patent grant could lead to a result that would differ from applying patent principles. In addition, continuing to intermingle the language of both patent misuse and

<sup>&</sup>lt;sup>114</sup> See Machlup, supra note x, at 10.

antitrust creates confusion for those who are trying to structure exploitation of their patents within legitimate bounds.

The problem is not simply an academic one but is particularly important to companies in innovative fields such as those in the life sciences. These fields spawn unusual forms of intellectual property whose exploitation invites innovative commercial agreements. Entering unfamiliar ground, it is particularly important to define the limits of patent exploitation.

This section considers the practice of Reach-Through Royalties, a licensing arrangement used in the biotech industry. With a Reach-Through Royalty, the patent holder charges royalties based on a percentage of sales of any product that is developed using the patented invention.<sup>115</sup>

Reach-Through Royalties provide a method of licensing what are known as "research tools." These tools are not products sold to consumers, but rather products used to develop the medicines, treatments, and medical tests that later will be sold to consumers.

The National Institutes of Health, in their guidelines for NIH grant recipients who use or create research tools, define the term "research tool" to embrace the full range of tools that scientists use in the laboratory, including cell lines, monoclonal antibodies, reagents, animal models, growth factors, combinatorial chemistry and DNA libraries, clones and cloning tools (such as PCR), methods, laboratory equipment and machines.<sup>116</sup>

<sup>&</sup>lt;sup>115</sup> Some would classify Reach-Through Royalties as part of a broader category of agreements including exclusive or nonexclusive licenses on future discoveries or options to purchase such licenses. *See* Michael A. Heller & Rebecca S. Eisenberg, *Can Patents Deter Innovation? The Anticommons in Biomedical Research* 280 SCIENCE 698 (1998); Paul F. Fehlner, *Biotech Research Tools* NAT<sup>2</sup>L L.AW J., Jul. 10, 2000, at B9. (Jul 10, 2002).

<sup>&</sup>lt;sup>116</sup> Principles and Guidelines for Recipients of NIH Research Grants and Contracts on Obtaining and Disseminating Biomedical Research Resources: Final Notice, 64 Fed. Reg. 72,090, 72,092 (1999)

For example, beginning with the discovery that human genes can be sequenced, spliced and shuttled between organisms, we now recognize that humans contain a large number of potential drug targets.<sup>117</sup> Thus, some companies have compiled large chemical "libraries" and devices that can screen an extensive number of potential targets to look for substances that inhibit specific proteins in the human body.<sup>118</sup> Such research may be aimed at finding a chemical that will operate on a particular protein or it may be aimed at screening a large number of human proteins hoping that one will be inhibited which can then be developed into a life sciences product of some kind.

When a company purchases the rights to use a research tool, neither the company nor the patent holder knows whether the research will be successful. Much life sciences research is unsuccessful, but of those endeavors that success, some lead to blockbuster drugs that can produce billions of dollars in returns.<sup>119</sup> In response to this environment,

<sup>[</sup>*hereinafter* NIH Guidelines]; In combinatorial chemistry, researchers try to synthesize and assemble large groups of compounds so that a particular substance can be exposed quickly to a wide range of compounds to search for potential biological reactions. *See* Stu Borman, Reducing Time to Drug Discovery CENEAR Vol 77 No. 10, p.33 (March 8, 1999) <u>http://pubs.acs.org/hotartcl/cenear/990308/comb1.html</u>; Stu Borman, Combinatorial Chemistry, Chemical & Engineering News (April 6, 1998)

http://pubs.acs.org/hotartcl/cenear/980406/comb.html; see also Jeffrey Hanke, Genomic and New Technologies as Catalysts for Change in the Drug Discovery Paradigm J. Law, Med & Ethics (Winter 2000) (describing state-of-the-art approaches to computational chemistry). The process can be expensive and difficult to accomplish with the desired speed and accuracy. See id. For a description of combinatorial chemistry efforts at a variety of biotech companies, see Stu Borman, Combinatorial Chemistry: Industry is Embracing the Technology 'Totally" as Researchers Continue to Advance the Art of Rapid Synthesis and Screening, CHEM & ENGINEERING NEWS (April 6, 1998) (available at

http://pubs.acs.org/hotartcl/cenear/980406/comb.html); see also Edward N. Trifonov, *Earliest Pages of Bioinformatics*, BIOINFORMATICS Vol. 17 No. 1 p. 5 (2000) (describing the early development of the field).

<sup>&</sup>lt;sup>117</sup> Jeffrey Hanke, *Genomics and New Technologies as Catalysts for Change in the Drug Discovery Paradigm*, J. L. MED. & ETHICS (Winter 2000).

<sup>&</sup>lt;sup>118</sup> Id.

<sup>&</sup>lt;sup>119</sup> For example, Lipitor, a cholesterol lowering drug developed by Pfizer, generated almost \$8 billion in sales in 2002. The antidepressant drug, Zoloft, earned \$2.7 billion while Viagra, the erectile dysfunction drug earned \$1.7 billion during the same period. *See* Tanja Sturm, *Pfizer Profits Rise on Blockbuster Drugs*, WORLD MARKETS ANALYSIS, Jan. 23, 2003. One scholar compares research tools to mining tools during the Gold Rush era, a useful analogy in light of the tantalizing promise of fantastic returns compared to the many minors who earned little or nothing. *See* James Gregory Cullen, *Panning for Biotechnology Gold: Reach-Through Royalty Damage Awards for Infringing Uses of Patented Molecular Sieves*, 39 J.L. & TECH. 553, 553 (1999).

some patent holders require royalties measured as a percentage of the final product created through a process which included using the research tool. In other words, patent holders say, "We do not know if you will ultimately invent something suggested by our research tool, and we do not know how much the invention might be worth, but if you do hit pay dirt, you must pay us a percentage of what you earn in the future." As described in Congressional testimony, such payments provide revenues from any downstream commercial products to those who own intellectual property that may now be of uncertain value or utility.<sup>120</sup>

Reach-Through Royalties have been criticized for creating a royalty stacking effect in which downstream research and production may be prevented or hampered by the presence of too many rights holders.<sup>121</sup> This is particularly problematic if multiple reach-through royalties are added as the product moves through research, development, and production.

Some commentators have suggested that Reach-Through Royalties should be permitted because they allow parties to receive research tools at reduced or nominal up-

<sup>&</sup>lt;sup>120</sup> See Testimony of Dr. Harold Varmus, President of Memorial Sloan-Kettering Cancer Center, Hearing on Gene Patents and Other Genomic Inventions, House Judiciary Subcommittee on Courts & Intellectual Property (July 13, 2000) (available at http://www.house.gov/judiciary/varm0713.htm).

<sup>&</sup>lt;sup>121</sup> See, e.g., Fehlner, *supra* note x, at 2; Rebecca S. Eisenberg, *Technology Transfer and the Genome Project: Problems with Patenting Research Tools*, 5 RISK: HEALTH, SAFETY & ENVIRONMENT 163, 172 (Spring 1994); Testimony of Dr. Harold Varmus, President of Memorial Sloan-Kettering Cancer Center, Hearing on Gene Patents and Other Genomic Inventions, House Judiciary Subcommitte4e on Courts & Intellectual Property (July 13, 2000) (available at http://www.house.gov/judiciary/varm0713.htm) (reachthrough provisions result in sub-optimal use and discourage the vigorous development of the discovery). In particular, Heller and Eisenberg argue that reach-through licensing agreements give each upstream patent holder a continuing right to be present at the downstream bargaining table. As owners stack overlapping and inconsistent claims on downstream products, it produces an anticommons effect in which the resource is underutilized. *See* Heller & Eisenberg, *supra* note x, at 698-701; *see also*, John H. Barton, *Research-Tool Patents: Issues for Health in the Developing World*, 80(2) BULL. OF THE WORLD HEALTH ORG. 121 (2002) (describing ways in which purchasers have tried to avoid Reach-Through Royalties, including moving research off-shore).

front costs.<sup>122</sup> From this perspective, Reach-Through Royalties may facilitate the use and dissemination of scientific knowledge, allowing cash-starved companies to purchase research tools and allowing innovative outsourcing arrangements.<sup>123</sup>

One could also argue that Reach-Through Royalties allow inventors to coax customers into using their products by offering to share the risk. You win, you pay big; you lose, you pay a nominal sum.

The NIH rejected this line of argument, noting that although the arrangement may be attractive to the parties, it has the effect of creating restricted access to subsequent tools and adds to the general proliferation of ties and competing interests that is the source of current access problems.<sup>124</sup> In other words, the NIH rejected the notion that one should evaluate Reach-Through Royalties solely from the perspective of the participants involved.<sup>125</sup> Rather, one must consider the systemic effects of Reach-Through Royalties and ask whether these are consistent with patent policy.

<sup>&</sup>lt;sup>122</sup> See NIH Guidelines, supra note x, at 72,093(Principle #3).

<sup>&</sup>lt;sup>123</sup> See id. (noting the reduction of up-front costs for purchasers); Steven Maebius, *The University Office of Technology Transfer: The Attorney's Perspective*, 5 CASRIP PUB. SERIES: STREAMLINING INT'L INTELLECTUAL PROPERTY 90, 91 (1999) (describing reach-through royalties as the cost of out-sourcing R&D to the biotech industry).

<sup>&</sup>lt;sup>124</sup> See NIH Guidelines, supra note x, at 72,093 (Principle #3).

<sup>&</sup>lt;sup>125</sup> Kaplow offered a related point in arguing against the notion that one can determine patent policy by determining whether an individual party is extracting more reward than contemplated by the patent system. Kaplow argues that the approach is wrong in that it focuses solely on change in reward, to the exclusion of change in societal costs, and on the individual parties, rather than on the system as a whole. *Compare* Kaplow, *supra* note x, at 1821 (criticizing the assumption that the only factor relevant in assessing various patent practices is the amount of reward available to the individual patent holder as opposed to recognizing the need to assess all of the variables necessary to compare the change in overall social cost to overall social benefit) *with* USM Corp. v. SPS Tech. Inc., 694 F.2d 505, 511 (7<sup>th</sup> Cir. 1982) (framing the relevant question as whether the individual is extracting more reward than contemplated by the patent system). *See also* Kaplow, *supra* note x, at 1820 (noting that it is wholly indeterminate how any individual case or, similarly, any single component of patent-antitrust doctrine should be decided, because the question is whether the *totality* of the courts' patent-antitrust decisions leads to the appropriate reward).

The legal status of Reach-Through Royalties is unclear. NIH guidelines strongly discourage the use of Reach-Through Royalties.<sup>126</sup> In contrast, one district court recently ruled that a license provision with Reach-Through Royalties did not constitute misuse.<sup>127</sup> Moreover, in recent Congressional hearings, one industry expert noted the need for clarification on whether Reach-Through Royalties create antitrust or patent misuse problems, arguing that clear approval or disapproval would be better than the current uncertainty.<sup>128</sup>

Reach-Through Royalties may result in royalties paid long after the patent on the research tool has expired. Thus, the arrangement appears to extend the time of the patent beyond the time contemplated by patent law.<sup>129</sup> Is this an impermissible broadening that

<sup>&</sup>lt;sup>126</sup> See NIH Guidelines supra note 176 at 72,093.Principles and Guidelines for Recipients of NIH Research Grants and Contracts on Obtaining and Disseminating Biomedical Research Resources: Final Notice, NATIONAL INSTITUTES OF HEALTH (published at 64 C.R.R. 72090) (Dec. 23, 1999) [hereinafter NIH Guidelines].

Reach-through royalty or product rights, unreasonable restraints on publication and academic freedom, and improper valuation of tools impede the scientific process whether imposed by a not-for-profit or for-profit provider of research tools. While these Principles are directly applicable only to recipients of NIH funding, it is hoped that other not-for-profit and for-profit organizations will adopt similar policies and refrain from seeking unreasonable restrictions or conditions when sharing materials. *Id.* at (Principle #3).

<sup>&</sup>lt;sup>127</sup> See Bayer AG v. Housey Pharmaceuticals, Inc., 228 F. Supp. 2d 467 (D. Del 2002).

<sup>&</sup>lt;sup>128</sup> See Testimony of Dr. David Earp, Federal Trade Commission Hearings on Competition and Intellectual Property Law and Policy in the Knowledge-Based Economy, Feb 26, 2002 (Held at the Haas School of Business) (Transcript p. 269-73) [hereinafter FTC Hearings].

<sup>&</sup>lt;sup>129</sup> Two other topics present variations on the Reach-Through Royalty theme. The first is the use of Reach-Through payments, not as a contract between parties, but as a remedy imposed by a court for infringement. See Cullem, supra note x (arguing in favor of Reach-Through Damages). The second is the use of socalled Reach-Through Claims in a patent application. For example, an application for a method of screening to identify compounds with a certain biological activity, could also contain product claims directed to the compounds identified using the assays and pharmaceutical compositions containing such compounds. See Vicky Clark, Reach-Through Infringement: What are the Limits?, BIO-SCIENCE LAW REVIEW (May 16, 2002) (available at http://pharmalicensing.com/features/legal); see also Stephen G. Kumin, Mark Nagumo, Brian Stanton, Linda S. Therkorn, & Stephen Walsh, Reach-Through Claims in the Age of Biotechnology, 51 AM. U.L. REV. 609 (2002)Univ. of Rochester v. G.D. Searle & Co., 249 F. Supp. 2d 216 (W.D.N.Y. 2003) (infringement claim failed because patent merely described a general plan for creating pain relief medication and was thus held to be invalid as an "attempt to preempt the future before it has arrived."); Although Reach-Through Damage Awards and Reach-Through Claims may present issues similar to those raised by Reach-Through Royalties, they also present other issues that are beyond the scope of this article. See, e.g., Intra-Video v. Hughes Elec. Corp, 51 USPQ2d 1383, 1384 (S.D.N.Y. 1999) (arguing that proposing a damage theory that includes royalties beyond the expiration of the patent does not

should constitute misuse or should it be an acceptable licensing practice? The answer will differ depending on whether patent policies are applied as opposed to an antitrust rule of reason analysis.

Applying antitrust principles to the time extension aspects of Reach-Through Royalties,<sup>130</sup> requires examining the market power and anticompetitive effects balanced against the pro-competitive effects.<sup>131</sup> A Reach-Through Royalty, however, may not generate the types of problems that concern antitrust law.

A patent confers the right to exclude others from using the invention. Once a patent expires, however, other competitors are free to use the invention and may enter the market in competition with the original patent holder. Thus, even if a patent holder is still extracting royalties from a particular user after the patent expires, other competitors may now enter the market and compete freely outside that contract. The process of post-expiration competition would be inhibited only if competitors had no room to maneuver outside of contracts held by the patent holder.

This is essentially an issue of market power, one that would arise only if the patent holder possesses sufficient power in its market, such that there is demand for its product and there are no effective substitutes.<sup>132</sup> Thus, under an antitrust analysis, we

constitute misuse because a damage theory is not developed in the course of a business dealing related to the patent).

<sup>&</sup>lt;sup>130</sup> This article describes Reach-Through Royalties as an example of an extension of the time of the patent. Reach-Through Royalties also raise potential issues concerning extension of the scope of the patent. In particular, Reach-Through Royalties raise the question of whether patent holders are collecting royalties on products outside the teachings of the invention.

<sup>&</sup>lt;sup>131</sup> Of course, after sufficient experience, the courts could conclude that Reach-Through Royalties are so likely to produce anticompetitive effects on balance that a per se test would be sufficient. *See* text accompany notes x-y, *supra* (describing classic and varying antitrust per se tests).

<sup>&</sup>lt;sup>132</sup> Dr. Earp described a particularly vexing problem for those who advise biotech companies on issues that might require a determination of market power. Research tool licenses, such as those that would contain Reach-Through Royalties, generally are entered into at an early stage of development. At that time, the company has no product and no market power. Even a very conservative outside counsel might conclude that the license agreement presents no problem. When the agreement is actually scrutinized years down the

would only be concerned in the case of a firm with market power.<sup>133</sup> Only then would we see anticompetitive effects extending beyond the patent grant.

Even if a firm had market power and the behavior resulted in anticompetitive effects, we would still have to weigh these against any pro-competitive effects. Procompetitive effects include that Reach-Through Royalties offer an effective way to manage the valuation uncertainty facing the patent holder. Managing this uncertainty may eliminate barriers to activity in the industry and promote research.

In short, an antitrust analysis is unlikely to identify any actionable harm from the potential time extension of Reach-Through Royalties. There would be no relevant anticompetitive effects at all without market power, and many inventions licensed through Reach-through Royalties would not command market power.<sup>134</sup> Even in the case of market power, any anticompetitive effects of a Reach-Through Royalty may still be outweighed by the pro-competitive benefits.

The result under patent principles, however, would be quite different. A patent does not grant a guarantee of return. It offers a time-limited opportunity in which to try

road, the product may be quite successful. A market power analysis could yield considerably different results. *See* FTC Hearings, *supra* note x, at 271-72.

<sup>&</sup>lt;sup>133</sup> For example, suppose that a patent holder has sufficient power in the market to lock-in most potential licensees. n that case, the long-term royalties may have the effect of locking licensees into using the patent holder's technology, particularly if the licensee is required to pay regardless of whether it uses or continues to use the patent holder's product. These circumstances would raise the costs for post-expiration rivals who must sell to licensees that are already committed to paying for the older technology. Why should I purchase your newer tool to complete my research post-expiration when I will have to pay reach-through royalties to the old patent-holder regardless of anything else I use? *See* HOVENKAMP ET AL, *supra* note x, at § 3.3 p. 3-26 (describing this potential problem in the general context of term extension).

<sup>&</sup>lt;sup>134</sup> The 1995 FTC/DOJ on Licensing Intellectual Property discuss the evaluation of grant backs, a licensing practice that provides useful insight into the way in which antitrust principles would be applied to Reach-Through Royalties. In a grant back, the license holder agrees to give the patent holder the right to use any improvements that the licensee may make to the patented technology. The guidelines note that grant backs should be tested under the rule of reason. They may have pro-competitive effects, particularly if they are nonexclusive, by allowing the parties to share risk and reward. They may also have anticompetitive effects if they substantially reduce the licensee's incentives to engage in research and development. Finally, the Guidelines note that an important factor in the analysis will be whether the patent holder has market power. *See* FTC/DOJ GUIDELINES, *supra* note x, at 107-08.

to garner a return on an invention. A patent holder may be unsuccessful in bringing a product to market during the patent period, for example, but we do not extend the time of the patent because extensions threaten to increase the overall duplicative activity of the system and to increase the societal cost of the patent system as a whole. Thus, we may be concerned about an extension of time, even if that extension would not constitute recognizable harm under antitrust principles.

In addition, while the royalty stacking problem is not the kind of anticompetitive effect that antitrust typically considers, it is the type of harm that could be considered under patent principles. A typical anticompetitive effect would be one that allows a firm to raise prices and restrict the supply of its own product. In other words, the firm profits by using the power to exclude other competitors, and the consumers pay the price. Royalty stacking may create systemic economic effects that are undesirable, but those are unrelated to the patent holder's ability to raise prices and restrict the supply of its product beyond the term of the patent. Royalty stacking, however, could constitute a systemic harm that contravenes the goals of the patent system and could be considered under a patent analysis.<sup>135</sup>

One district court recently ruled that a licensing provision containing Reach-Through Royalties did not constitute misuse.<sup>136</sup> The *Bayer* Court held that they license

<sup>&</sup>lt;sup>135</sup> One could argue that Reach-Through Royalties are no different from an arrangement in which a patent holder contributes patent rights in exchange for an equity interest in the development company. With an equity exchange, the patent holder has transformed the patent into a vehicle that may bring variable rewards far out in the future, and one would not argue that such an arrangement constitutes patent misuse.

An equity exchange, however, would not create the royalty stacking problem of Reach-Through Royalties and arguably would not encourage the wasteful defensive patenting behavior described below. In other words, if you will share in the upside potential even if the company ultimately uses someone else's tool, you have less incentive to engage in defensive patenting behavior. In addition, as an equity owner, the patent holder may take on risk as well as the possibility of reward. With Reach-Through Royalties, a <sup>136</sup> See Bayer AG v. Housey Pharmaceuticals, Inc., 228 F. Supp. 2d 467 (D. Del 2002).

did not improperly extend the time of the grant because the invention would be used during the term of the patent, although royalties would be paid and determined later.<sup>137</sup>

The Court did concede that neither party submitted any evidence to prove that royalties would be collected only for use prior to the expiration of the patent.<sup>138</sup> The reality may be different in that parties may return to pre-clinical research, which could include the use of research tools, when later research yields imperfect results. It is an interesting argument, nonetheless. Could one avoid patent misuse simply by drafting the agreement to say that post-expiration royalties are for use of the research tools prior to the expiration of the patent?<sup>139</sup>

One could argue that such drafting is simply form over substance, given that the effect of the agreement remains unchanged. More importantly, however, the recrafted Reach-Through Royalty presents other problems that distort balances within the patent system.

First, increasing the time for determining the reward to research tool developers encourages more wasteful and duplicative activity, such as defensive research. As

Due to the court's finding that defendant's acts do not constitute patent misuse, it will be unnecessary for the court to address the presence or absence of an anti-competitive effect.

<sup>&</sup>lt;sup>137</sup> See id. at 471.

<sup>&</sup>lt;sup>138</sup> See id. at 474 n. 5.

<sup>&</sup>lt;sup>139</sup> One could avoid the time extension problem by structuring the license so that the Reach-Through Royalties are paid only until the patent expires. Any misuse inquiry would then turn on possible extensions of the scope of the patent, rather than the time of the patent.

The *Bayer* Court considered and dismissed this approach. It followed the *Brulotte* line of cases and held that the arrangement must have been for the convenience of the parties because the defendant presented no evidence that it had suggested other licensing approaches during negotiations. *See* Bayer, *supra* note x, at 468-69. Interestingly, the Court engaged in no antitrust or rule of reason analysis at all. Although it cited the modern cases from the Federal Circuit, the *Bayer* Court declined to engage in this type of analysis on the ground that it had found no improper extension of the grant under the *Brulotte*-type inquiry.

See id. at 468 n. 2. Thus, the *Bayer* Court's approach would require a full two-step inquiry in which a Court first engages in a *Brulotte* balancing analysis to determine whether the parties acted beyond the time or scope of the patent based on the absence or presence of voluntariness, and then engages in a rule of reason analysis.

described above, defensive research occurs when a patent holder tries to anticipate all possible alternative solutions to the problem solved by the patent, even inferior solutions and obtain protection for those alternate solutions. The greater the potential reward, the more a patent holder will be willing to spend protecting that reward. Extending the period in which payment may come to fruition to an infinite point in the future greatly increases the potential reward. Thus, patent holders will rationally spend more on the duplicative activity of defensive research.<sup>140</sup>

In addition, Reach-Through Royalties, even those crafted to apply only to preexpiration use, shift the patent system's current allocation of reward between those who participate in the early stage of inventions and those who participate in later stages of invention. A number of aspects of the patent system limit the reward that may be gained by early stage inventors in comparison to those who come later. These include threshold requirements relating to how far the invention must have advanced to receive patent protection as well as limits on the time period in which an inventor may try to garner a return on the invention. As a result, only a portion of the patent system reward will be allocated to inventors at the early stages of innovation. By leaving open the time for calculating the value of a current use, the recrafted Reach-Through Royalties potentially bring a greater portion of the total award available for an invention to those who contribute to the early stages of invention at the expense of those who contribute later.

One could argue that this type of agreement merely fixes a defect in the patent system. Perhaps the patent system is designed to allow greater reward to early stage

<sup>&</sup>lt;sup>140</sup> Although the size of the reward alone is not the relevant criteria for determining patent misuse, the size of the reward is not irrelevant. *See* note x, *supra* (discussing Kaplow). For example, increasing the reward matters when an increase produces other relevant systemic effects, such as increasing duplicative activity. It may also matter for calculating the change in the overall systemic effect.

inventors but early stage inventors have been unable to capture their reward. Following this argument, although the recrafted Reach-Through Royalties alter the balance, the shift could be consistent with patent policy.

Such a shift, however, would be made more appropriately in the context of a broader policy consideration of the overall effects of shifting patent rewards from later stage participants to earlier stage participants. This is particularly true in light of concerns that the current intellectual property system in this country operates to allocate too much reward to early stage participants over later stage participants.<sup>141</sup>

In short, if we test for patent misuse by applying antitrust principles, Reach-Through Royalties generally would not generate a cognizable harm. If we test for patent misuse by applying patent principles, however, Reach-Through Royalties raise serious concerns. This type of licensing practice, therefore, is a good example of the problems inherent in the current drift of the doctrine of patent misuse. If we limit our misuse inquiry to antitrust principles, we will be blind to significant concerns under patent principles.

## Conclusion

In the last decade, the Federal Circuit has reframed the doctrine of patent misuse by prohibiting a finding of misuse without the application of antitrust law. This shift has all but eliminated patent misuse as a live doctrine, separate from antitrust.

The Federal Circuit's approach is inconsistent with legislative and judicial precedent and threatens to distort both patent and antitrust law. Moreover, requiring an antitrust violation for a finding of misuse will ignore key concerns of patent policy. In

<sup>&</sup>lt;sup>141</sup> [add cites]

contrast to the current drift of the doctrine, patent misuse should be allowed to thrive outside the confines of an antitrust analysis.