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A Rose by Any Other Name: Elucidating the Intersection of Patent and Antitrust Laws in Tying Arrangement Cases

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Kyle Friedman

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A ROSE BY ANY OTHER NAME: ELUCIDATING THE INTERSECTION OF PATENT AND ANTITRUST LAWS IN TYING ARRANGEMENT CASES

Kyle Friedman*

I. INTRODUCTION

In *Illinois Tool Works Inc. v. Independent Ink, Inc.*, ¹ an ink manufacturer sought to invalidate patents held by a printing system manufacturer by alleging that the patents resulted in illegal tying and monopolization in violation of Sections 1 and 2 of the Sherman Act. ² This action was preceded by an infringement action brought by Illinois Tool Works (ITW), which was dismissed for lack of personal jurisdiction. ³ Independent Ink (Independent) responded by seeking a judgment of noninfringement and invalidity of patents against ITW. ⁴ The district court granted summary judgment in favor of ITW on both counts. ⁵ The court of appeals reversed and remanded with respect to Section 1 of the Sherman Act, ⁶ and affirmed the grant of summary judgment with respect to Section 2 of the Sherman Act. ⁷ The Supreme Court granted certiorari. ⁸

This case provided the Supreme Court with an opportunity to reconcile the precarious balance between patents, which supply the holder with exclusive rights, and antitrust laws, which were developed in an effort to curb market domination.

- * J.D., 2008, University of Maine School of Law. The author wishes to thank Professor Thomas Ward for his infectious excitement in the topic, and her family and friends for their encouragement and support.
 - 1. 547 U.S. 28 (2006).
 - 2. 15 U.S.C.S. §§ 1-2 (LexisNexis 2001 & Supp. 2007). Section 1 of the Sherman Act states: Every contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce among the several States, or with foreign nations, is hereby declared to be illegal. Every person who shall make any contract or engage in any combination or conspiracy hereby declared to be illegal shall be deemed guilty of a felony, and, on conviction thereof, shall be punished by fine not exceeding \$100,000,000 if a corporation, or, if any other person, \$1,000,000, or by imprisonment not exceeding 10 years, or by both said punishments, in the discretion of the court.

Id. § 1.

Section 2 of the Sherman Act states:

Every person who shall monopolize, or attempt to monopolize, or combine or conspire with any other person or persons, to monopolize any part of the trade or commerce among the several States, or with foreign nations, shall be deemed guilty of a felony, and, on conviction thereof, shall be punished by fine not exceeding \$100,000,000 if a corporation, or, if any other person, \$1,000,000, or by imprisonment not exceeding 10 years, or by both said punishments, in the discretion of the court.

Id. § 2.

- 3. Ill. Tool Works Inc. v. Indep. Ink, Inc., 547 U.S. 28, 32 (2006).
- 4. *Id*.
- 5. Indep. Ink, Inc. v. Trident, Inc., 210 F. Supp. 2d 1155, 1177 (C.D. Cal. 2002).
- 6. Indep. Ink, Inc. v. Ill. Tool Works, Inc., 396 F.3d 1342, 1352-53 (Fed. Cir. 2005).
- 7. Id. at 1353.
- 8. Ill. Tool Works Inc. v. Indep. Ink, Inc., 545 U.S. 1127 (2005).

Specifically, the Supreme Court addressed the issue of whether market power in a patented product should be presumed as a matter of antitrust law. The Court bridged the gap between the two overlapping sections of law and ruled that a patent does not invariably indicate that the holder has market power, thus shifting the burden to the plaintiff to prove that the defendant has market power in all cases involving a tying arrangement. The court of the plaintiff to prove that the defendant has market power in all cases involving a tying arrangement.

This Note considers whether the Supreme Court was correct in deciding that there should be no presumption of market power in tying arrangement cases involving a patented tying item, as a matter of antitrust law, in addition to matters of patent law. This Note reviews the backgrounds of antitrust law and patent law, including judicial and legislative developments, and the overlap of the two areas of law. This Note then reviews the history and development of tying arrangements, specifically those dealing with a patented tying good and an unpatented tied good, and the development of the "per se" rule and the "rule of reason." Finally, this Note concludes that, while the Supreme Court made the correct decision in *Illinois Tool Works*, it failed to consider that its holding will have the effect of placing an entirely new emphasis on the term "market," which was previously irrelevant, and the fact that the term "market" leaves excessive room for discrepancies among parties, potentially creating a flood of previously inapplicable litigation.

II. BACKGROUND

A. Relevant Antitrust Legislative History

The Sherman Act, ¹¹ generally recognized as the basic federal antitrust law, was passed in 1890, essentially in an attempt to hinder monopolizations present within the American economy. ¹² Specifically, it "prohibited contracts, combinations, and conspiracies in restraint of trade . . . [and] monopolization and conspiracies and attempts to monopolize." ¹³ The Sherman Act borrowed terminology from foreign and American common law, yet it was not intended to codify the precedent developed by courts over the years. ¹⁴ The principles differed from the foreign jurisdictions from which the Act borrowed by imparting the responsibility of developing and implementing the law on the courts rather than the legislature. ¹⁵ In addition, the brevity of the Sherman Act drew remarks from the Supreme Court comparing it to the United States Constitution, in that both tend to condemn certain behaviors without specifically defining them. ¹⁶ As such, much of the antitrust law in the United States has been developed by judges. ¹⁷ Further confusing the paradigm was the fact that the intended purpose of the legislation varied from its actual effect; arguably, the main goal of the Act was "to enhance

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9. Ill. Tool Works Inc. v. Indep. Ink, Inc., 547 U.S. 28, 31 (2006).
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^{10.} Id. at 45.

^{11. 15} U.S.C. §§ 1-7 (2000).

^{12.} RICHARD POSNER, ANTITRUST LAW 33 (2d ed. 2001).

^{13.} *Id*.

^{14.} Id. at 33-35

^{15.} JAY DRATLER, JR., LICENSING OF INTELLECTUAL PROPERTY § 5.02, at 5-5 (2007).

^{16.} Id.

^{17.} Id.

consumer welfare by promoting economic efficiency in the operation of business and industry,"¹⁸ yet in effect the statute was written so vaguely that judges were not able to "translate [it] into coherent, administrable legal doctrine without doing serious and undesired damage to the economy."¹⁹ Thus, the courts frequently looked to the state of the economy for guidance.²⁰

Although the Sherman Act has been generally cultivated by the courts, Congress still retains the authorization to respond to the Act's inadequacies. Congress did just that in 1914 when it enacted the Clayton Act,²¹ which attempted to address the deficiencies with which the courts were struggling in interpreting the Sherman Act.²² The Clayton Act "displayed a concern with predatory competition which probably reflects . . . opposition to big business."²³ It more explicitly outlined injuries, which strayed from the "quasi-constitutional character" of the Sherman Act.²⁴ Specifically, the Act addressed price discrimination,²⁵ tying and exclusive dealing,²⁶ anticompetitive mergers and acquisitions,²⁷ and interlocking directorates,²⁸ among other things.

B. The Doctrine of Patent Misuse

The United States Constitution authorized Congress to develop laws in order "[t]o promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries." Patent law is codified in Title 35 of the United States Code.

The patent misuse doctrine generally refers to affirmative defense to infringement cases, and has been effective when the patent holder is either engaging in improper attempts to lengthen the reach of its patent, or when the patent holder's conduct violates antitrust laws.³⁰ Indeed, patent misuse itself is not considered an actionable tort.³¹ If there is a finding of misuse, the patent holder is rendered unable to sue for infringement until the misusing behavior has ceased.³² Although the doctrine of patent misuse is closely related to antitrust law, it actually arose from the patent law doctrine

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18. Id. § 5.02[1], at 5-7.
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^{19.} POSNER, supra note 12, at 35.

^{20.} Id.

^{21. 15} U.S.C. §§ 12, 13, 14-19, 20, 21, 22-27 (2000).

^{22.} POSNER, supra note 12, at 42.

^{23.} George J. Stigler, *The Origins of the Sherman Act, in* THE POLITICAL ECONOMY OF THE SHERMAN ACT 32, 35 (E. Thomas Sullivan ed., 1991).

^{24.} DRATLER, supra note 15, § 5.02[3], at 5-48.6.

^{25. 15} U.S.C. § 13 (2000).

^{26.} Id. § 14.

^{27.} Id. § 18.

^{28.} Id. § 19.

^{29.} U.S. CONST. art. I, § 8.

^{30.} George Gordon & Robert J. Hoerner, *Overview and Historical Development of the Misuse Doctrine*, *in* ABA Section of Antitrust Law, Intellectual Property Misuse: Licensing and Litigation 1, 1 (2000).

^{31.} Id. at 1-2.

^{32.} Id.

of contributory infringement, and the courts declined invitations to more closely relate the misuse doctrine to antitrust violations.³³

In sum, the doctrine of patent misuse has developed from "the prevention of anticompetitive effects, protection of licensees from overreaching by patentees, and ensuring compliance with the purposes of the patent laws."³⁴

C. The History of Patent Tying

Patent tying is a type of trade restraint where the patent holder requires that the licensee or buyer purchase related products from the patent holder as well.³⁵ The "tied" product is almost always a product that is incidental to the "tying" product, as the arrangement typically would not succeed otherwise.³⁶ The Supreme Court has defined a tying arrangement as "an agreement by a party to sell one product but only on the condition that the buyer also purchases a different (or tied) product."³⁷

1. Pre-1952 Patent Act Amendments

Patent tying cases date back to *Henry v. A. B. Dick Co.*, ³⁸ where the plaintiff, A. B. Dick Co., sold its patented stencil-duplicating machine with the limitation that the machine be used solely with supplies manufactured by the plaintiff. ³⁹ In the ensuing patent infringement action, the Supreme Court upheld the tie as legitimate ⁴⁰ and only mentioned the Sherman Act in passing. ⁴¹ The case provided fuel for supporters of legislation to further delineate and strengthen antitrust prohibitions on tying arrangements, and Section 3 of the Clayton Act was enacted soon after. ⁴² Section 3 represented a compromise between directly countering the *A. B. Dick* holding and still defining the provisions of the Sherman Act, proscribing ties in the cases when the effect of a tie "may be to substantially lessen competition or tend to create a monopoly."⁴³

Although, in effect, the enactment of Section 3 of the Clayton Act overruled A. B. Dick, the Supreme Court expressly overruled the decision three years after the

Id

^{33.} Id. at 2-3.

^{34.} *Id.* at 33.

^{35.} Id. at 75; POSNER, supra note 12, at 197.

^{36.} See POSNER, supra note 12, at 199. However, Posner points out:
[I]t is important to note that leverage is no more effective when the products are unrelated. Had IBM refused to sell computers unless the customers agreed to buy cake mix from it, this would not have enabled IBM to obtain greater profits. The price of the cake mix, minus whatever value the cake mix had, would have been perceived by the customers as an addition to the price of the computer.

^{37.} N. Pac. Ry. Co. v. United States, 356 U.S. 1, 5-6 (1958).

^{38. 224} U.S. 1 (1912), overruled by Motion Picture Patents Co. v. Universal Film Mfg. Co., 243 U.S. 502 (1917).

^{39.} Id. at 11-12.

^{40.} Id. at 35-36.

^{41.} See id. at 11-12.

^{42.} LAWRENCE SULLIVAN & WARREN GRIMES, THE LAW OF ANTITRUST: AN INTEGRATED HANDBOOK, \S 7.2a, at 388-89 (2000).

^{43.} IBM Corp. v. United States, 298 U.S. 131, 136 (1936).

enactment, in *Motion Picture Patents Co. v. Universal Film Manufacturing Co.*⁴⁴ There, the seller of a motion picture company's patented film projector only permitted that the projectors be used with films that were also patented by Motion Picture Patents Co., an arrangement that the Supreme Court held unlawful.⁴⁵ However, while the Supreme Court's decision seemed to recognize that *A. B. Dick* was in violation of public policy, and that the enactment of Section 3 of the Clayton Act was an articulation of that public policy, several of the cases that followed illuminated the Supreme Court's position that not all ties were unlawful.⁴⁶

Morton Salt Co. v. G. S. Suppiger Co., 47 where the plaintiff sought an injunction for infringement of its patents on machines that deposited salt tablets, soon followed. 48 The defendant was manufacturing and licensing machines similar enough to the patent holder's that the patent holder took action. ⁴⁹ The trial court granted summary judgment in favor of the defendants, holding that the plaintiff "was making use of the patent to restrain the sale of salt tablets in competition with its own sale of unpatented tablets, by requiring licensees to use with the patented machines only tablets sold by [plaintiff]."50 The Court of Appeals for the Seventh Circuit reversed, noting that there was no evidence that the plaintiff's behavior tended to create a monopoly in violation of Section 3 of the Clayton Act.⁵¹ The Supreme Court reversed the Seventh Circuit decision, stating that a finding of a violation of the Clayton Act was unnecessary and asserting that the plaintiff "may not claim protection of his grant by the courts where it is being used to subvert that policy."52 Because of its tying arrangements, the plaintiff had effectively restrained competition in a market in which the plaintiff held no patent, and this behavior would need to be purged for the patent to become enforceable.53

In *Mercoid Corp. v. Mid-Continent Investment Co.*,⁵⁴ the plaintiff, the patent holder of a domestic heating system that contained an unpatented component, brought a contributory infringement suit against the defendant for the sale of the unpatented device within the plaintiff's system.⁵⁵ The Supreme Court held that the plaintiff was enjoined from enforcing its patent as long as it continued to attempt to restrain trade in the market of the unpatented component, and stated that "[the] Court has consistently held that the owner of a patent may not employ it to secure a limited monopoly of an unpatented material used in applying the invention."⁵⁶ Thus, the *Mercoid* decision "effectively eliminated a patent holder's ability to prevent a

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44. 243 U.S. 502, 518 (1917).
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^{45.} Id.; Gordon & Hoerner, supra note 30, at 9.

^{46.} See, e.g., Jefferson Parish Hosp. Dist. No. 2 v. Hyde, 466 U.S. 2 (1984).

^{47. 314} U.S. 488 (1942).

^{48.} Id. at 489.

^{49.} Id. at 490-91.

^{50.} Id. at 490.

^{51.} Id.

^{52.} Id. at 494.

^{53.} Id. at 493.

^{54. 320} U.S. 661 (1944).

^{55.} Id. at 662-63.

^{56.} Id. at 664.

competitor from making and selling a component that had no use other than as part of a patented invention."⁵⁷

These cases together established the premise for the 1952 Patent Act Amendments. Section 271(c)⁵⁸ stated that selling non-staple goods specifically made for use in a patented product would amount to contributory infringement, with Section 271(d) outlining exceptions to that prohibition.⁵⁹ Although the 1952 Patent Act amendments effectively narrowed the *Mercoid* range of contributory infringement, it failed to address the competitive effect standard for patent misuse. Thus, tying arrangements involving a patented tying item were still suspect.⁶⁰

2. The Establishment of the Per Se Rule

The per se rule was developed partly in reaction to the difficulties in applying the previously established rule, called the "rule of reason." The rule of reason necessitated that "the factfinder weigh[] all of the circumstances of a case in deciding whether a restrictive practice should be prohibited as imposing an unreasonable restraint upon competition," which, ostensibly, required a lengthy investigatory period. Such an inquiry could involve analyses of relevant circumstances, including economic fields and histories. This type of detailed inquiry often placed a financial burden upon the parties involved, and undeniably put certain parties at a disadvantage. The per se rule, in part, aimed to relieve this burden and place all parties involved in a given case on a more level playing field.

Before the 1952 Patent Act Amendments, in a case that all but ignored the patent misuse doctrine and focused on antitrust rules, the Supreme Court delved into the development of the per se rule for tying arrangements in its holding in *International Salt Co. v. United States*. ⁶² The defendant there held patents on two machines that used salt products, and distributed the machines through leases that required the lessee

57. Gordon & Hoerner, supra note 30, at 18.

58. 35 U.S.C. § 271(c) (2000). The code section reads:

Whoever offers to sell or sells within the United States or imports into the United States a component of a patented machine, manufacture, combination or composition, or a material or apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in an infringement of such patent, and not a staple article or commodity of commerce suitable for substantial noninfringing use, shall be liable as a contributory infringer.

Id.

59. Id. § 271(d). Subsection (d) reads:

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 done one or more of the following: (1) derived revenue from acts which if performed by another without his consent would constitute contributory infringement of the patent; (2) licensed or authorized another to perform acts which if performed without his consent would constitute contributory infringement of the patent; (3) sought to enforce his patent rights against infringement or contributory infringement

Id.

- 60. SULLIVAN & GRIMES, supra note 42, § 15.11a, at 884.
- 61. DRATLER, *supra* note 15, § 5.02[2][a][ii], at 5-23 (quoting Continental T.V., Inc. v. GTE Sylvania Inc., 433 U.S. 36, 49 (1977)).
 - 62. 332 U.S. 392 (1947).

to purchase all salt consumed by the patented machines from the patent holder as well. 63 The plaintiff, the United States government, alleged that the tying arrangement violated Section 1 of the Sherman Act, and Section 3 of the Clayton Act. 64 The Supreme Court affirmed the district court's grant of summary judgment to the United States, and affirmed the district court's further development of the per se rule. 65 Regarding the per se rule, the Supreme Court stated that "it is unreasonable, *per se*, to foreclose competitors from any substantial market."66 Although the decision neglected to specifically refer to market power as a factor in the analysis, it did note that "[t]he volume of business affected by these contracts cannot be said to be insignificant or insubstantial and the tendency of the arrangement to accomplishment of monopoly seems obvious."67

The *International Salt* decision was important, apart from establishing the per se rule, in that it was factually almost indistinguishable from *Morton Salt*, although two very different analyses were used in approaching the cases. While *Morton Salt* was analyzed mostly with patent laws and almost altogether eschewed the possibility of an antitrust claim, ⁶⁸ *International Salt* declared that the earlier patent misuse cases supported the proposition that this type of a tying arrangement was unlawful under the Sherman Act, thus unequivocally rendering the per se rule applicable in patent tying cases.

3. Pre-1988 Patent Act Amendments

The per se rule, which was reaffirmed in *Northern Pacific Railway Co. v. United States*, ⁶⁹ states that a tying arrangement qualifies as patent misuse if the plaintiff can establish four factors. ⁷⁰ First, it must be established that the arrangement involves two physically separate items, which speaks more to patent law than antitrust law, and thus requires a more stringent test of separability. ⁷¹ Next, the tied product must be a staple

It is unnecessary to decide whether respondent has violated the Clayton Act, for we conclude that in any event the maintenance of the present suit to restrain petitioner's manufacture or sale of the alleged infringing machines is contrary to public policy and that the district court rightly dismissed the complaint for want of equity.

Id. at 494.

^{63.} Id. at 394.

^{64.} *Id.* at 393.

^{65.} Id. at 396.

^{66.} Id.

^{67.} *Id.*; see also Jefferson Parish Hosp. Dist. No. 2 v. Hyde, 466 U.S. 2, 15 n.25 (1984) ("The rationale for *per se* rules in part is to avoid a burdensome inquiry into actual market conditions in situations where the likelihood of anticompetitive conduct is so great as to render unjustified the costs of determining whether the particular case at bar involves anticompetitive conduct.").

^{68.} The Supreme Court in *Morton Salt* mentioned the Clayton Act only to state: "The question we must decide is not necessarily whether respondent has violated the Clayton Act, but whether a court of equity will lend its aid to protect the patent monopoly when respondent is using it as the effective means of restraining competition with its sale of an unpatented article." Morton Salt Co. v. G. S. Suppiger Co., 314 U.S. 488, 490 (1942). The opinion concludes:

^{69. 356} U.S. 1, 5 (1958).

^{70.} Gordon & Hoerner, supra note 30, at 40.

^{71.} Id.

item, as Congress explicitly mandated in Section 271(c) of the Patent Act.⁷² In other words, the tied product cannot have any practical noninfringing use.⁷³ Third, access to the tying item must be conditioned on the tied item, whether expressed, via a contract, or implied, via a packaged deal.⁷⁴ Finally, the licensor must have sufficient market power to compel the licensee to accept the agreement.⁷⁵

In *United States v. Loew's, Inc.*, ⁷⁶ the Supreme Court further defined the applicability of the per se rule. There, the United States alleged that six major distributors of copyrighted films were engaging in block-booking⁷⁷ in violation of Section 1 of the Sherman Act, and the district judge agreed. ⁷⁸ The Supreme Court affirmed, and although it limited the per se application to cases where there has first been a finding of economic power, ⁷⁹ it also reiterated that "[t]he requisite economic power is presumed when the tying product is patented or copyrighted." Thus, while the *Loew's* Court somewhat narrowed the cases in which the per se rule would apply, it also explicitly stated that the mere existence of a patent would denote market power.

The *Loew's* holding was slightly undermined some twenty years later, when the holding in *Jefferson Parish Hospital District No. 2 v. Hyde*⁸¹ once again narrowed the field of possible per se analyses. There, a board certified anesthesiologist was denied admission to the medical staff at the East Jefferson Hospital because the hospital was a party to a contract that stipulated that all of its anesthesiology needs would be performed by a specific medical corporation.⁸² The Supreme Court restated its jurisprudence on product tying:

[T]he essential characteristic of an invalid tying arrangement lies in the seller's exploitation of its control over the tying product to force the buyer into the purchase of a tied product that the buyer either did not want at all, or might have preferred to purchase elsewhere on different terms. When such "forcing" is present, competition on the merits in the market for the tied item is restrained and the Sherman Act is violated.⁸³

The Supreme Court found that such "forcing" is only feasible when the licensor has enough market power to compel the licensee to partake in an agreement that they

^{72. 35} U.S.C. § 271(c) (2000).

^{73.} Gordon & Hoerner, supra note 30, at 40.

^{74.} Id.

^{75.} Id. at 40-41.

^{76. 371} U.S. 38 (1962), abrogated by Ill. Tool Works Inc. v. Indep. Ink, Inc., 547 U.S. 28 (2006).

^{77.} Block-booking is defined as, "[i]n the licensing or use of movies, the practice by film distributors of conditioning the license or use on the acceptance of an entire package or block of films, which typically includes unwanted or inferior films." BLACK'S LAW DICTIONARY 182 (8th ed. 2004).

^{78.} Loew's, 371 U.S. at 40-41.

^{79.} *Id.* at 45. Although the decision provided little guidance as to what would constitute "economic power," it did state that "[t]he standard of illegality is that the seller must have 'sufficient economic power with respect to the tying product to appreciably restrain free competition in the market for the tied product.'" *Id.* (quoting N. Pac. Ry. Co. v. United States, 356 U.S. 1, 6 (1958)).

^{80.} Id.

^{81. 466} U.S. 2 (1984).

^{82.} Id. at 5.

^{83.} Id. at 12.

would not have agreed to in a competitive market.⁸⁴ Thus, while the decision bolstered the market power argument, it ultimately found that the "[p]er se condemnation—condemnation without inquiry into actual market conditions—is only appropriate if the existence of forcing is probable."⁸⁵

In 1988, the Patent Act was further amended to include Sections 271(d)(4) and (5). 86 This provision sought to protect patent holders against a misuse claim in the event of a license conditioned upon the sale of a patented product (a patented tying arrangement), without a showing of market power in the relevant market. In sum, the 1988 Amendments clarified that, in cases of alleged patent misuse, a per se analysis is inappropriate. So while the Patent Act appeared unambiguous on the issue, the same matter remained unresolved as a matter of antitrust law, leading us to the decision in *Illinois Tool Works*.

III. THE ILLINOIS TOOL WORKS DECISION

In *Independent Ink, Inc. v. Trident, Inc.*, ⁸⁷ Independent Ink, Inc. (Independent), a distributor and supplier of printer ink and ink products, filed suit against Trident, Inc. (Trident) and Illinois Tool Works, Inc. (ITW), a manufacturer of piezoelectric ink jet printheads that print bar codes on corrugated materials and kraft paper, ⁸⁸ alleging that ITW was violating the Sherman Act. ⁸⁹ ITW held a patent on the printhead, which was the first of its type, as well as a patent on an ink container used by the printhead

- 84. Id. at 13-14.
- 85. Id. at 15.
- 86. Sections 271(d)(4)-(5) of the Patent Act read:

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 done one or more of the following: . . . (4) refused to license or use any rights to the patent; or (5) conditioned 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.

- 35 U.S.C. § 271(d)(4)-(5) (2000).
 - 87. Indep. Ink, Inc. v. Trident, Inc., 210 F. Supp. 2d 1155, 1155 (C.D. Cal. 2002).
- 88. *Id.* at 1158. Piezoelectric technology "uses electronic pulses to cause tiny changes in the shape of a ceramic crystal that can propel droplets of ink out of the printhead at rates as high as 10,000 droplets per second." Brief for Respondent at 3, Ill. Tool Works Inc. v. Indep. Ink, Inc., 547 U.S. 28 (2006) (No. 04-1329).
- 89. *Indep. Ink*, 210 F. Supp. 2d at 1159. The Sherman Antitrust Act is "[a] federal statute, passed in 1890, that prohibits direct or indirect interference with the freely competitive interstate production and distribution of goods." BLACK'S LAW DICTIONARY 1382 (7th ed. 1999). Explaining the purpose of the Sherman Act, the Supreme Court states:

The Sherman Act was designed to be a comprehensive charter of economic liberty aimed at preserving free and unfettered competition as the rule of trade. It rests on the premise that the unrestrained interaction of competitive forces will yield the best allocation of our economic resources, the lowest prices, the highest quality and the greatest material progress, while at the same time providing an environment conducive to the preservation of our democratic political and social institutions.

N. Pac. Ry. Co. v. United States, 356 U.S. 1, 4 (1958).

system. ⁹⁰ In addition, ITW produced an unpatented ink formulated specifically for use in its patented printhead system. ⁹¹ Independent manufactured ink that feasibly could be used in ITW's product, but for ITW's licensing agreements. ⁹²

ITW's systems were mainly used by original equipment manufacturers (OEMs) to print bar codes on cartons. 93 ITW licensed its patented and unpatented products to OEMs as a package deal, requiring OEMs to exclusively buy and use ITW's unpatented ink in conjunction with the patented printer head and ink container. 94 The license also prohibited OEMs from refilling the ink containers with ITW's ink or anyone else's. 95

ITW's overarching argument on appeal was that the existence of a patent on the tying product should not indicate a presumption of market power. It argued that market power was an inappropriate distinguisher of harmful tying and tying that does not pose any anticompetitive harm.⁹⁶

ITW first argued that *International Salt* was an inappropriate precedent, as the Supreme Court had not discussed the defendant's market power when establishing the illegality of a tying arrangement. 97 ITW then asserted that, while the Supreme Court later provided the reasoning for the market power presumption in Loew's, the stated rationale was suspect for several reasons.⁹⁸ In Loew's, the Court explained that its reasoning stemmed from patent misuse cases, in which it was established that patent holders who employed patent tying arrangements would not be entitled to any infringement relief, due to the Supreme Court's reluctance to extend a patent holder's economic control over unpatented products.⁹⁹ ITW questioned the Supreme Court's rationale on several bases. ITW first argued that the cases cited in Loew's did not address the issue of whether a patent denoted market power to the degree that antitrust concerns should be implicated, as the main concern in the noted cases was one of equity, not one of anticompetitive effects. 100 In addition, ITW noted that any reference to the term "monopoly" referred to the patent holder's monopoly over its own particular device, and was not meant to be construed in an antitrust sense. 101 Furthermore, ITW argued that the Loew's interpretation of the International Salt theory (that any tying arrangement would have anticompetitive consequences) was faulty, as the Supreme Court simply presumed such consequences to be inevitable, and

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90. Indep. Ink, 210 F. Supp. 2d at 1158.
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^{91.} Id.

^{92.} Id.

^{93.} Id.

^{94.} *Id*.

⁹⁵ *Id*

Brief for the Petitioners at 9, Ill. Tool Works Inc. v. Indep. Ink, Inc., 547 U.S. 28 (2006) (No. 04-1329).

^{97.} Id. at 16.

^{98.} Id.

^{99.} Loew's, 371 U.S. at 45-46 (citing Motion Picture Patents Co. v. Universal Film Mfg. Co., 243 U.S. 502 (1917); Carbice Corp. v. Am. Patents Dev. Corp., 283 U.S. 27 (1931); Leitch Mfg. Co. v. Barber Co., 302 U.S. 458 (1938); Ethyl Gasoline Corp. v. United States, 309 U.S. 436 (1940); Morton Salt Co. v. G. S. Suppiger Co., 314 U.S. 488 (1942); Mercoid Corp. v. Mid-Continent Inv. Co., 320 U.S. 661 (1944)).

^{100.} Brief for the Petitioners, *supra* note 96, at 17.

^{101.} Id. at 18 n.4.

in fact refused to heed the *International Salt* defendant's evidence to the contrary. Thus, ITW argued that the Supreme Court's application of the *International Salt* theory in *Loew's* was "the product of a judicial determination about the appropriate limits on intellectual property rights and not the result of antitrust analysis." ¹⁰³

ITW further argued that the Supreme Court's position on tying agreements, whether involving intellectual property or not, had changed significantly since Loew's. 104 While originally the Supreme Court's assessment of tying agreements was that they served simply to suppress competition, ITW asserted that the more contemporary position was to recognize that, while tying agreements certainly could have anticompetitive effects, whether the effects were an actuality required "considerable market analysis." 105 In fact, ITW contended, the Supreme Court had taken steps to apply more stringent market power standards, as evidenced in Jefferson Parish, defining "market power" as any one seller's ability to influence prices and output, and delineating that such market power must be considerable, not merely in existence yet inconsequential. 106 Thus, ITW initially argued that the standard that a patent conveys the market power necessary to establish an unlawful tie was not based on a Supreme Court market analysis determination. 107

ITW continued by arguing that, regardless, the requisite market power could not be presumed simply from the existence of a patent. ITW pointed out that the Supreme Court had routinely refused to extract the presumption of market power from the mere existence of a patent or copyright, and asserted that there was no rational justification for treating such cases any differently simply because there was a tying arrangement. Moreover, ITW stressed that there was no empirical evidence to suggest that a patent conferred market power, and thus a presumption of one was inappropriate. In fact, ITW pointed out that, quite to the contrary, the existence of a patent only conferred complete power over that exact product; other functionally similar products (perhaps patented themselves) might present adequate competition to undermine any market power.

In addition to simply having no reason to maintain this presumption, ITW argued that the presumption actually had a negative market effect, by penalizing procompetitive behavior and encouraging unjustified litigation. First, ITW argued that most tying arrangements were economically beneficial, by ensuring quality and low costs, and increasing value and price competition, as well as aiding market entry. Thus, ITW contended, it followed that patent ties could have the same procompetitive

^{102.} Id. at 18-19.

^{103.} Id. at 19.

^{104.} Id. at 20.

^{105.} Id.

^{106.} Id. at 21-22.

^{107.} Id. at 22.

^{108.} *Id.* at 23.

^{109.} *Id.* at 23-24.

^{110.} Id. at 24.

^{111.} Id. at 26.

^{112.} Id. at 27-34.

^{113.} Id. at 27-28.

effect. 114 Second, it argued, litigation was promoted in that, as it stood, the presumption could only be rebutted through "expert testimony or other credible economic evidence of the cross-elasticity of demand, the area of effective competition, or other evidence of lack of market power." In fact, any pre-litigation showing of uncontested evidence of competitive market substitutes "is not sufficient to rebut the presumption." The amount and type of evidence necessary to rebut the presumption involved vast amounts of data collection and economic analysis, which could bear enormous costs that many patent holders would not be able to support, conceivably rendering certain patent holders at the mercy of even the most nebulous accusations.¹¹⁷ Furthermore, ITW pointed out that federal enforcement agencies have refused to adopt any sort of market power presumption when an intellectual property was at issue, based on the rationale that intellectual property rights only confer complete market power with respect to a specific product, not an entire market. 118 Further bolstering its contention, ITW indicated the bulk of academic opinion in all facets of antitrust law called for the abandonment of the market power presumption. 119 Finally, ITW argued that reliance on the lack of Congressional action to address the market presumption issue was inappropriate, because Congress had mandated through the Sherman Act that the courts develop antitrust law through common law. 120 Thus, ITW concluded, Congress would have needed to explicitly withdraw that authorization for the Supreme Court to consider Congressional inaction in making its decision. 121

Independent developed its case for the Supreme Court by laying down a roadmap of ITW's position in the ink market, and Independent's own interactions with the market and with ITW. Independent indicated that ITW dominated the market for inkjet printers as a result of its patent, emphasizing ITW's own concession of this fact. ¹²² Indeed, according to Independent, ITW's licenses accounted for over 95% of high resolution inkjet systems for carton bar coding purposes, in a market that saw an increase in demand totaling over \$115 million in five years. ¹²³ Independent conceded that, while two other companies, Markem and Xaar, had begun selling similar commercial inkjet printers since the initiation of the lawsuit, these companies were struggling to make an appreciable dent in the market, accounting cumulatively for only 15% of sales. ¹²⁴

Furthermore, Independent asserted that ITW took advantage of its dominant position in its niche market by attempting to also dominate ink sales through its licensing techniques. ¹²⁵ These licensing agreements not only extended to buyers of its product, but also to customers of said buyers, thus effectively manipulating its patent

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114. Id. at 29.
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^{115.} Id. at 32.

^{116.} Id.

^{117.} Id. at 33-34.

^{118.} Id. at 35.

^{119.} Id. at 37-38.

^{120.} Id. at 40.

^{121.} Id.

^{122.} Brief for Respondent at 2, Ill. Tool Works Inc.v. Indep. Ink, Inc., 547 U.S. 28 (2006) (No. 04-1329).

^{123.} *Id*.

^{124.} Id. at 3.

^{125.} Id. at 4.

to shut other manufacturers out of a market in which ITW did not hold patents. ¹²⁶ Independent proclaimed that ITW's own customers expressed dismay with the intense restrictions placed upon them by the licensing agreements, complaining about the "tremendous price" they needed to pay for ITW's ink, as well as expressing an interest in comparable inks entering the market. ¹²⁷ When Independent tried to "fill the demands of [ITW's] customers" with comparable product at a fraction of ITW's price, ITW reacted "not by lowering its ink prices, but by trying to exclude its competitors from the ink market." ¹²⁸ Independent argued that ITW attempted to convince its customers that third party ink would "cause corrosion, clogging, and even fires," ¹²⁹ and "bullied" its customers into compliance with the tying arrangement by threatening legal action. ¹³⁰

In addition, Independent argued that, to rule in favor of ITW, the Supreme Court would need to overturn fifty years of settled law stating that, in patent cases involving tying agreements, market power is presumed. Independent argued that this presumption of market power in patent tying cases has been recognized by the Supreme Court since its decision in *International Salt Co., Inc. v. United States* 132 in 1947. Since then, Independent asserted, the Supreme Court had reaffirmed its decision to recognize the patent tying presumption in *Standard Oil Co. of California v. United States*, 134 Northern Pacific Railway Co. v. United States, 135 Times-Picayune Publishing Co. v. United States, 136 United States v. Loew's, Inc., 137 Jefferson Parish Hosp. Dist. No. 2 v. Hyde, 138 United States Steel Corp. v. Fortner Enterprises, Inc., 139 and Fortner Enterprises, Inc. v. United States Steel Corp. 140

Furthermore, Independent asserted that Congress's enactment of the Clayton Act, ¹⁴¹ in response to *Henry v. A. B. Dick Co.*, ¹⁴² indicated that Congress "plainly

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126. Id.
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^{127.} Id. at 4-5.

^{128.} Id. at 5.

^{129.} Id.

^{130.} Id. at 6.

^{131.} Id. at 13-14.

^{132. 332} U.S. 392 (1947).

^{133.} Brief for Respondent, *supra* note 122, at 14.

^{134. 337} U.S. 293, 304 (1949) ("[T]he case is significant for the importance it attaches, in the absence of a showing that the supplier dominated the market, to the practical effect of the contracts.").

^{135. 356} U.S. 1, 18 (1957) (Harlan, J., dissenting) ("[I]t appears that *International Salt* simply treated a patent as the equivalent of proof of market control").

^{136. 345} U.S. 594, 608 (1953) ("The patents on their face conferred monopolistic . . . market control").

^{137. 371} U.S. 38, 45-46 (1962) ("The requisite economic power is presumed when the tying product is patented or copyrighted").

^{138. 466} U.S. 2, 16 (1984) ("For example, if the Government has granted the seller a patent or similar monopoly over a product, it is fair to presume that the inability to buy the product elsewhere gives the seller market power.").

^{139. 429} U.S. 610, 619 (1977) ("Thus, the statutory grant of a patent monopoly . . . give[s] rise to a presumption of economic power.").

^{140. 394} U.S. 495, 502-503 (1969) ("[E]conomic power over the tying product can be sufficient even though the power falls far short of dominance and even though the power exists only with respect to some of the buyers in the market.").

^{141.} The relevant portion to the Clayton Act states:

intended Section 3 to overrule the *A. B. Dick* decision and to condemn arrangements in which sale of a patented product is conditioned on the sale of other separate goods."¹⁴³ After the enactment of the Clayton Act, Independent claimed that the Supreme Court continued to apply the principles enumerated in the Clayton Act in patent tying cases, such as *Motion Picture Patents Co.* ¹⁴⁴

Independent then argued that the market power presumption should be upheld because it was a fair and efficient way to structure proof in tying cases. ¹⁴⁵ Specifically, Independent claimed that it was simply an economic reality that the types of patents involved in tying cases tended to be highly valuable, and thus inherently confer market power. ¹⁴⁶ In addition, Independent noted that ITW tended to erroneously focus on patents in general, and not patents involved in tying arrangements, and that the Court never asserted that most patents confer market power, only those with tying arrangements. ¹⁴⁷ Along those lines, Independent pointed out that the typical customer would be unwilling to agree to a conditioned purchase agreement unless the commodity were highly valuable, and likewise, unless there was no market competition. ¹⁴⁸ Independent stressed that requirement ties, like the one in the present case, were generally utilized to make the price vary with the customer's usage, which amounts to price discrimination, which, in turn, was evidence of market power. ¹⁴⁹ In a competitive market, Independent argued, consumers were only likely to accept tying arrangements when forced to do so because of the seller's market power. ¹⁵⁰

Independent then argued that the presumption of market power in patent tying cases benefited the public by alleviating the extensive market analysis burden on small businesses, which would help to ensure that meritorious claims were heard. ¹⁵¹ In addition, Independent noted that the patent holder could rebut the presumption by presenting evidence that the patented product had close market substitutes, and that the patent holder was the correct party to uphold this burden. ¹⁵² Independent asserted that

It shall be unlawful for any person engaged in commerce, in the course of such commerce, to lease or make a sale or contract for sale of goods, wares, merchandise, machinery, supplies, or other commodities, whether patented or unpatented, for use, consumption, or resale within the United States or any Territory thereof or the District of Columbia or any insular possession or other place under the jurisdiction of the United States, or fix a price charged therefor, or discount from, or rebate upon, such price, on the condition, agreement, or understanding that the lessee or purchaser thereof shall not use or deal in the goods, wares, merchandise, machinery, supplies, or other commodities of a competitor or competitors of the lessor or seller, where the effect of such lease, sale, or contract for sale or such condition, agreement, or understanding may be to substantially lessen competition or tend to create a monopoly in any line of commerce.

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15 U.S.C. § 14 (2000).

142. 224 U.S. 1 (1912).

143. Brief for Respondent, supra note 122, at 17.

144. Id.

145. Id. at 20.

146. Id. at 21.

147. Id. at 22.

148. Id. at 25-26.

149. Id. at 26-27.

150. Id. at 28.

151. Id. at 30-31.

152. Id. at 32.
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ITW's argument that Xaar and Markem constituted market substitutes was rightfully rejected by the Court of Appeals, because those companies did not begin to operate until a year after the advent of the case at hand, and the products did not constitute substitutes close enough to ITW's product.¹⁵³ Independent proceeded to argue that the correct venue to address the market power presumption was in Congress, which had repeatedly declined opportunities to eliminate it on several occasions.¹⁵⁴

In its decision in *Illinois Tool Works*, the Supreme Court immediately noted that the 1988 amendment to the Patent Act to include Sections 271(d)(4)-(5)¹⁵⁵ had eliminated the market power presumption in patent cases, yet the Court now faced the question of whether the presumption should survive in the antitrust context.¹⁵⁶ The majority recognized the changing view of tying arrangements, referring to an earlier comment by Justice Black:

[D]ecisions rejecting the need for proof of truly dominant power over the tying product have all been based on a recognition that because tying arrangements generally serve no legitimate business purpose that cannot be achieved in some less restrictive way, the presence of any appreciable restraint on competition provides a sufficient reason for invalidating the tie.¹⁵⁷

Thus, the Supreme Court acknowledged the economic shift that allowed for tying arrangements to have some goal other than to constrain competition within a particular market and recognized the need to react accordingly. The Supreme Court then explained that its opinion in *Jefferson Parish* described that, while a tying arrangement may not necessarily indicate patent misuse, any "contract to sell a patented product on condition that the purchaser buy unpatented goods exclusively from the patentee is a *per se* violation of § 1 of the Sherman Act." In other words, the inquiry focused on market conditions, not just on the behavior of the patent holder.

The Supreme Court then went on to acknowledge the intertwining of patent and antitrust laws in *International Salt*, but noted the subsequent untwining through congressional action, which led to the present reexamination of the per se illegality of tying arrangements involving a patented tie.¹⁵⁹ The Court stated that it was "clear that Congress did not intend the mere existence of a patent to constitute the requisite

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 done one or more of the following: . . . (4) refused to license or use any rights to the patent; or (5) conditioned 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.

^{153.} Id. at 32-33.

^{154.} Id. at 34-35.

^{155.} The amended sections state:

³⁵ U.S.C. § 271(d)(4)-(5) (2000).

^{156.} Ill. Tool Works Inc. v. Indep. Ink, Inc., 547 U.S. 28, 31 (2006).

^{157.} *Id.* at 35 (quoting Fortner Enterprises, Inc. v. United States Steel Corp., 394 U.S. 495, 498-99 (1969)).

^{158.} Id. at 36-37.

^{159.} Id. at 40-41.

'market power'" in its enactment of Section 271(d)(5),¹⁶⁰ and that although the amendment did not speak directly to antitrust laws, it elicited a reassessment of the per se rule in the antitrust context.¹⁶¹ Taking this into consideration, the Supreme Court noted that, while some tying arrangements were certainly unlawful, there needed to be an inquiry into the relevant market to determine evidence of market power.¹⁶²

The Supreme Court also rejected Independent's suggestion of a rebuttable presumption of market power in tying arrangements involving a patented tying product and an unpatented tied product and the suggestion that the Court:

differentiate between tying arrangements involving the simultaneous purchase of two products that are arguably two components of a single product—such as the provision of surgical services and anesthesiology in the same operation . . . or the licensing of one copyrighted film on condition that the licensee take a package of several films in the same transaction . . .—and a tying arrangement involving the purchase of unpatented goods over a period of time, a so-called "requirements tie." ¹⁶³

In rejecting the proposed alternatives, the Supreme Court noted that, in *International Salt*, it was the mere existence of the patent on the tying product that led the Court to presume market power, and that price discrimination and evidence of an above-market price for the tied item were both factors that could indicate market power, but alone were not sufficient to do so fully, and thus were not proper markers thereof. ¹⁶⁴ Ultimately, the Supreme Court's holding reiterated part of the standing law: a tying arrangement is a per se violation of Section 1 of the Sherman Act when the seller or licensor conditions the sale of its patented product on the buyer or licensee's agreement to also purchase or lease a second product, patented or unpatented, and the patent holder has market power in the tying product market. ¹⁶⁵

IV. THE "MARKET DEFINITION" ISSUE

The Supreme Court's holding in *Illinois Tool Works* was hardly a shock to the bulk of the legal community. Although the burden shift that will take place in the cases to follow will undoubtedly affect small businesses, the holding also reflects the generally accepted trend toward acknowledgment that while patents unequivocally confer market power, the only safe and fair presumption is that the patent holder has

160. Section 271(d)(5) states:

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 done one or more of the following: . . . (5) conditioned 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.*

³⁵ U.S.C. § 271(d)(5) (2000) (emphasis added).

^{161.} Ill. Tool Works, 547 U.S. at 41-42.

^{162.} Id. at 42-43.

^{163.} Id. at 40.

^{164.} Id. at 44-45.

^{165.} *Id.* at 46. The Court remanded based on the Section 1 claims and declined to address the Section 2 claims, although its reasoning ostensibly could be applied to Section 2 claims as well.

market power over *that patented item*. In other words, although a patent holder holds exclusive rights to that item, there very well may be substitutes within the market. In recognizing this, the Supreme Court has effectively paralleled anti-trust laws with patent laws, resulting in the alignment of Congressional intent and Supreme Court precedent. As it stood, in both patent misuse and antitrust cases involving patented tying arrangements, the plaintiff would have to prove: 1) two distinct products were involved; 2) the tied item was a staple item; 3) the sale of one good was conditioned on the sale of another; and 4) the licensor had market power over the tying product's market. Before *Illinois Tool Works*, if the licensor was a patent holder, and the patented machine was the one at issue, the fourth prong was presumed. Now, it is the responsibility of the plaintiff to make specific inquiries into the appropriate market and present evidence, rebuttable by the defendant, as to the influence the patent holder holds over the market.

Among the possible effects and implications such a holding will have on the application of antitrust laws, poised at the front line of issues is that of the exact definition of "market." Whereas previously the exact definition and boundaries of a particular market were irrelevant to the analysis, litigation will now inevitably focus on the data a plaintiff will present to prove market power, along with any evidence the defendant will bring to rebut the plaintiff's data. The opportunity for discrepancies among interpretation of which market is the relevant market are boundless because the literal wording in patent law, antitrust law, and judicial history fail to provide useful parameters.

The Department of Justice's 1995 Antitrust Guidelines for the Licensing of Intellectual Property provided insight into the issue. Although the Guidelines were written prior to *Illinois Tool Works*, they were written after *Jefferson Parish* and clearly endorse the essence of the *Illinois Tool Works* decision. The Guidelines denote that "[t]he Agencies, (the U.S. Department of Justice and the Federal Trade Commission) will not presume that a patent, copyright, or trade secret necessarily confers market power upon its owner." ¹⁶⁸ In addition, the Guidelines were written to "assist those who need to predict whether the Agencies will challenge a practice as anticompetitive," and consequently "cannot remove judgment and discretion in antitrust law enforcement." ¹⁶⁹ Thus, while limited in its applicability, the Guidelines are helpful in defining possible markets and indicate just how difficult it may prove to be to define which market is relevant.

^{166.} Gordon & Hoerner, supra note 30, at 39.

^{167.} In *U.S. Healthcare, Inc. v. Healthsource, Inc.*, 986 F.2d 589 (1st Cir. 1993), the First Circuit noted:

There is no subject in antitrust law more confusing than market definition. One reason is that the concept, even in the pristine formulation of economists, is deliberately an attempt to oversimplify – for working purposes – the very complex economic interactions between a number of differently situated buyers and sellers, each of whom in reality has different costs, needs, and substitutes.

Id. at 598

^{168.} Antitrust Guidelines for the Licensing of Intellectual Property, § 2.2 (April 6, 1995), *reprinted in* 4 Trade Reg. Rep. (CCH) ¶ 13, 132 [hereinafter Guidelines]. 169. *Id.* § 1.0.

The Guidelines define three types of markets relevant to evaluating the effects of a licensing arrangement. In addition to the following types of product markets, a product's geographical market must also be taken into consideration. ¹⁷⁰ Generally, the relevant geographic market is the "area in which the seller operates, and to which the purchaser can practicably turn for supplies" or services. ¹⁷¹

First and foremost are goods markets, which can include any number of different sub-markets. However, the inquiry into whether a licensing arrangement has competitive effects can include inquiries into "markets for final or intermediate goods made using the intellectual property, or [whether there are] effects upstream, in markets for goods that are used as inputs, along with the intellectual property, to the production of other goods."¹⁷²

The Guidelines also describe the technology market. These markets consist of a licensed good and its close substitutes—in other words, "the technologies or goods that are close enough substitutes significantly to constrain the exercise of market power with respect to the intellectual property that is licensed." From there, however, the technology's "close substitutes" must be identified. To do this, "the smallest group of technologies and goods over which a hypothetical monopolist of those technologies and goods likely would exercise market power," must be ascertained. According to the Agencies, depending on the types of technologies, further evidence that could pertain to competitive significance can include "evidence of buyers' and market participants," whether "competing technologies are comparably efficient," and "the best available information to estimate market acceptance."

Finally, a separate market analysis is prescribed for research and development (R&D) and innovation markets. Here, the Agencies recommend analyzing an impact on competition to innovate "either as separate competitive effect in relevant goods or technology markets, or as a competitive effect in a separate innovation market," which recognizes the possible difficulty in adequately addressing innovation analyses, taking into consideration, for example, the development of goods that are still in production. The Specifically, however, the Agencies recognize that an innovation market contains new or improved goods or processes and the close substitutes. "Close substitutes" can include "[R&D] efforts, technologies, and goods that significantly constrain the exercise of market power with respect to the relevant [R&D]." Here, again, the Agencies suggest taking into account "all relevant evidence." This can include "market share data," "evidence of buyers' and market participants' assessments of the competitive significance of innovation market participants," presence of "shares of identifiable assets or characteristics upon which innovation depends, on shares of

^{170.} See Brown Shoe Co., Inc. v. United States, 370 U.S. 294, 324 (1962).

^{171.} Tampa Elec. Co. v. Nashville Coal Co., 365 U.S. 320, 327 (1961).

^{172.} Guidelines, supra note 168, § 3.2.1.

^{173.} Id. § 3.2.2.

^{174.} Id.

^{175.} Id.

^{176.} Id. § 3.2.3.

^{177.} Id.

^{178.} Id.

research and development expenditures, or on shares of a related product."¹⁷⁹ Thus, while the Guidelines use broad norms that allow for room to challenge a license, theoretically, the relevant market in which to analyze a patent tie "will always be the market in which that [patent] competes against other technologies."¹⁸⁰

V. CONCLUSION

The standards created by the Guidelines have been criticized as "inevitably [relying] on speculative assessments . . . and inaccurate definitions of the relevant market." Any ultimate ruling can turn on the definition a given court accepts and "policy actions based on narrower market definitions would fail to recognize the competitive effects of excluded suppliers" while "[p]olicy decisions based on broader market definitions might miss harms to competition that are masked by the improper inclusion of non-competitors." In addition, the Guidelines' preoccupation with the "hypothetical monopolist" may prove to be less tangible than necessary.

In order to most effectively apply the Guidelines, it is important to consider the policy reasoning behind the market power inquiry. Market power is simply a manner of showing the effects of economic conduct, and conceivably this inquiry can be replaced with a thorough consideration of any evidence of harm to any competition. Moreover, "[defining the market] serves only as an analytical framework for identifying the unlawful exercise of market power." By considering any anticompetitive effect as a replacement for market power, a court would be able to skip the market definition altogether and simply assume that a showing of anti-competitive effect in any given market makes the patent holder a member of the market. Conceivably, this could make a patent holder a member of any number of markets

^{179.} *Id*.

^{180.} SULLIVAN & GRIMES, *supra* note 42, § 15.8a, at 832. The following example illustrates this concept:

If A holds a patent on a new widget and licenses B, the effect of the license can be measured in the widget market; so, too if A holds and licenses IP in a cost saving process for manufacturing widgets. Again, if gizmos are inputs essential to widget manufacture and A's proprietary technology pertains to gizmos, the widget market may be appropriate.

Id. § 15.8a, at 833.

^{181.} Alvin R. Chin, *The Misapplication of Innovation Market Analysis to Biotechnology Mergers*, 3 B.U. J. Sci. & Tech. L. 6, ¶ 24 (1997).

^{182.} Howard A. Shelanski, *Antitrust Law as Mass Media Regulation: Can Merger Standards Protect the Public Interest?*, 94 CAL. L. REV. 371, 390 (2006). Professor Shelanski provides an example:

If consumers shift to take-out pizza as soon as the price of take-out hamburgers rises, then hamburgers alone probably do not constitute a relevant market. To understand the true state of competition, one should broaden the market definition to include pizza and perhaps other kinds of food. The relevant product market might turn out to be "take-out fast food." Similarly, if people in neighborhood A are willing to travel to neighborhood B to get take-out, but no farther, then a geographical market definition confined to A provides an incomplete picture of the level of competition. The market should be defined, then, as "take-out fast food in neighborhoods A and B."

Id.

^{183.} Id. at 414-15.

^{184.} Wanda Jane Rogers, Beyond Economic Theory: A Model for Analyzing the Antitrust Implications of Exclusive Dealing Arrangements, 45 DUKE L.J. 1009, 1033 (1996).

simultaneously. This inquiry into the purpose of defining the market is arguably more important than actually defining that market. With each inquiry, the court should ask, "What is the antitrust question in this case that market definition aims to answer?" This case-by-case, ex ante inquiry becomes especially important in the context of patent ties, as the existence of a patent necessarily confers market power to some degree (albeit solely over the patented item).

In abolishing the presumption of market power in patent tie cases as a matter of antitrust law, the Supreme Court took an affirmative step to recognize the trend of economic attitudes. The consequences, though potentially far-reaching, have yet to come to fruition, and the legal community must wait to discover the actual effects of the decision.