COMPULSORY ROYALTY-FREE LICENSING AS AN ANTITRUST REMEDY FOR PATENT FRAUD: LAW, POLICY AND THE PATENT-ANTITRUST INTERFACE REVISITED

Lawrence Schlam†

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[†] Professor of Law, Northern Illinois College of Law. B.B.A., City College of New York (now C.U.N.Y.); J.D., New York University School of Law. The author wishes to thank Russell D. Slifer and Catherine Klima-Silberg for their invaluable assistance in preparing this article for publication.

INTRODUCTION

The rise of the modern corporation has brought a concentration of economic power which can compete on equal terms with the modern state—economic power versus political power, each strong in its own field. The state seeks in some aspects to regulate the corporation. while the corporation, steadily becoming more powerful. makes every effort to avoid such regulation. Where its own interests are concerned, it even attempts to dominate the state.1

[One area] in which the future might see more active enforcement from [the Department of Justice] than in the recent past [is fraudulent] procurement of patents.2

Corporate abuse of economic power has long been difficult to control.3 However, in recent times, this problem is more apparent. Due to the growing competitive importance of modern technology, there is now great incentive for corporations to obtain patents at any cost, causing patentees to frequently risk engaging in fraudulent or inequitable conduct before the Patent Office.4 Unfortunately, patent fraud is even more difficult to detect and remedy than most other forms of corporate economic misconduct. The Patent Office does not have adequate resources to prevent fraud.5 Rather than the ordinary pursuit of patent office interfer-

- ¹ A. A. Berle, Jr. & G. C. Means, The Modern Corporation and Private Prop-ERTY 357 (1932).
- ² Donald I. Baker & Richard H. Sayler, U.S. Justice Department Patent-Antitrust Policy: The Hazards of Changing Policies on Distant Horizons, 365 PLI/PAT 105, 159 (1993).
- 3 See, e.g., John C. Coffee, Jr., "No Soul to Damn: No Body to Kick": An Unscandalized Inquiry Into the Problem of Corporate Punishment, 79 MICH. L. REV. 386, 390 (1981) (arguing that corporate criminality is "uniquely concealable").
- ⁴ For a description of activities that constitute fraud on the PTO and the difficult nature of proof of such conduct, see infra notes 51, 63, and 137.
- ⁵ In the original Patent Act of February 21, 1793, ch. 11, 1 Stat. 323, the granting of patents was made a purely clerical function, involving no examination on the merits, even though fraudulent excess was a ground for refusing to enforce the grant. Today, "[b]ecause of the immense volume of patent applications, the PTO [continues to be] necessarily limited in the time it may spend on ascertaining the facts necessary to judge patentability. Moreover, it has no testing facilities of its own." 7 JULIAN O. VON KALINOWSKI, ANTITRUST LAWS AND TRADE REGULATION, § 59.05(2)(b)(iii), at 59-67 (1992). As a result, the PTO decided to withdraw from any policing activity. "In a Notice dated September 8, 1988, the PTO Commissioner indicated that it would no longer investigate and reject original or reissue applications under 37 C.F.R. §1.56. The expressed reason for this new 'hands-off' policy was that the PTO is not an appropriate forum for determining intent to mislead. Thus we may expect, if anything, that the frequency and intensity of inequitable conduct litigation in the courts will increase." Robert L. Harmon, Patents and the Federal Circuit § 9.5(a), at 356 (3d ed. 1994). Consequently, "[the] requirement [of disclosure to the Patent Office] has grown in importance because of the highly technical nature of the subject matter of many patent applica-

ences or litigation over validity in response to licensing or infringement suits, the prohibitive costs of patent litigation often tempt potential corporate competitors into collusion through settlements involving cross-licensing or other provisions.⁶ If fraudulently obtained patents go unchallenged there is much to be gained. Even more than fifty years ago, it was clear that in many important segments of our national economy "the privilege accorded by the patent monopoly [was being] shamefully abused [as] a device to control whole industries, to suppress competition, to restrict output, to enhance prices, to suppress inventions and to discourage inventiveness."

Criminal or civil actions may be brought by the Department of Justice to remedy patent antitrust violations, but there are fiscal, political, and practical limits to that agency's capacity to investigate, prosecute, and obtain relief for fraudulent procurement of patents.⁸ The Federal Trade Commission (FTC) also has investigatory and remedial authority in antitrust matters.⁹ It can order a complete array of essentially equitable remedies, including relief designed to correct non-competitive conditions in an industry or market,¹⁰ but it is also apparently without adequate resources to police patent applications.¹¹

tions, the difficulties inherent in searching the worldwide technical literature, and the unique knowledge that the applicant may hold." Northern Telecom, Inc. v. Datapoint Corp., 908 F.2d 931, 940 (Fed. Cir.), cert. denied, 498 U.S. 920 (1990). See also Kingsland v. Dorsey, 338 U.S. 318, 319 (1949) ("By reason of the nature of an application for patent, the relationship of attorneys to the patent office requires the highest degree of candor and good faith. In its relation to applicants, the office... must rely upon their integrity and deal with them in a spirit of trust and confidence..."); Precision Instrument Mfg. Co. v. Automotive Maintenauce Mach. Co., 324 U.S. 806, 818 (1945) ("Those who have applications pending with the Patent Office or who are parties to Patent Office proceedings have an uncompromising duty to report to it all facts concerning possible fraud or inequitableness underlying the applications in issue." 3. Effective March 16, 1992, new Patent Office rules clarify and reinforce the duties of disclosure, good faith, and candor. 37 C.F.R. § 1.56 (1997).

- ⁶ Although "[it] is difficult to estimate the total cost of repeatedly re-litigating patent validity on similar patents [one] study commissioned in 1989 estimates that the median cost of patent litigation in the United States is over \$300,000. 6 Peter C. Ku & William L. LaFuze, Mooting Patent Invalidity: Justiciability and the Case of Cardinal Chemical, 20 Rutgers Computer & Tech. L.J. 539, 541 n.6 (1994) (citations omitted).
 - ⁷ Final Report of the TNEC, S. Doc. No. 77-35, at 36 (1st Sess. 1941).
- 8 These limits have become even more apparent in recent years. "At the end of fiscal year 1989, for example, the Antitrust division employed a total of 458 staff, or 425 fewer staff (about half) of the 883 staff it had at the end of fiscal year 1980.'s Changes in Antitrust Enforcement Policies and Activities of the Justice Department, 59 Antitrust & Trade Reg. Rep. (BNA) No. 1495, at S-27 tbl.2.2 (Dec. 13, 1990); see also infra note 26 (on the effects of politics on antitrust enforcement).
 - ⁹ See generally Federal Trade Commission Act, 15 U.&C §41-58 (1994).
 - 10 See id. at §5(b).
- 11 Recently, for only the first time since the FTC was created in 1914, did the information obtained in an antitrust investigation initiated by the FTC result in the reexamination of a patent by the Patent Office. See Antitrust Investigation Leads to Biochemistry Patent Reexamination, FTC: WATCH, Dec. 21, 1992, No. 380, at 1. In the mid-1980s, the FTC opened investigation Leads to Biochemistry Patent Reexamination, FTC: WATCH, Dec. 21, 1992, No. 380, at 1.

Nevertheless, the FTC and the federal courts have authority to require, among other forms of relief, compulsory licensing of patents to "pry open to competition a market that has been closed by . . . illegal restraints. E12 Compulsory licensing decrees have been common, therefore, where corporations have misused patent rights in restraint of trade. 13 Where the door to competition is closed as a result of the use of fraudulently obtained patents, application of the corollary remedy of royalty-free licensing would seem compelling. This is especially true given both the lack of any equitable basis for claiming the rewards of invention and the practical difficulty of proving the level of fraud on the part of patentees and others usually necessary to invalidate patents.¹⁴ Compulsory royalty-free licensing can be used to eliminate the present value of a fraudulently obtained patent and to encourage the resumption of competinive conditions with a promise of an eventual return to defendants of control over licensing.¹⁵ Thus, patentees are not penalized as harshly with royalty-free licensing as they are with other available antitrust remedies, such as patent cancellation or dedication, where all property rights

tigation into the monopolization (through patent fraud) alleged in that matter. The patent in issue was for a method of mass-producing a form of the drug Interferon through DNA splicing techniques. Rather than attempting to declare the patent invalid, the results of the investigation, including statements from prominent scientists, were passed along to the PTO. See id.

- 12 International Salt Co. v. United States, 332 U.S. 392, 401 (1947) (In addressing the tying of salt products to leases of patented machines, the court stated that the goal of a suit in equity is not to punish past transgression nor end specific illegal practices, but to open markets.).
- 13 "[Many] courts have ordered compulsory licensing at a reasonable royalty." 3 RAYMOND C. NORDHAUS, PATENT-ANTITRUST LAW, §104C-2 (3d ed. 1977 & Supp. 1989). Antitrust consent decrees which require partial divestiture, for example, will also occasionally require mandatory patent licensing in order to improve the competitive condition of the preacquisition marketplace. See, e.g., United States v. United Techs. Corp., 1980-1 Trade Cas. (CCH) ¶ 63,792 (N.D. N.Y. 1981); International Tel. & Tel. Corp. v. General Tel. and Elec. Corp., 351 F. Supp. 1153 (D. Haw. 1973) (litigated judgment), aff'd in part, rev'd in part, 518 F.2d 913 (9th Cir. 1975); In re Continental Oil Co., 72 F.T.C. 850 (1967). Consent decrees in antitrust suits based on attempts to monopolize an industry through the use of patents often call for defendants to issue even royalty-free licenses. See, e.g., United States v. Pitney-Bowes, Inc., 1959 Trade Cas. (CCH) ¶ 69,235 (D. Conn. 1959).

Although the [Antitrust Division of the Justice Department] has been relatively unsuccessful in obtaining [dedication] in contested cases, provisions concerning dedication and royalty-free licensing have frequently been accepted by defendants in consent decrees. With the continued appearance of such provisions in consent decrees, the fact of their commonness may tend to overshadow [any constitutional objections] to such an extent that the judiciary will feel less reluctant in the future to decree such drastic relief in contested cases.

NORDHAUS, supra (citation omitted).

¹⁴ See Eikhart Brass Mfg. Co. v. Task Force Tips, Inc., 867 F. Supp. 782 (N.D. Ind. 1994); Avco Corp. v. PPG Indus., Inc., 867 F. Supp. 84 (D. Mass. 1994); see also David P. Cullen & Robert V. Vickers, Note, Fraud in the Procurement of a Patent, 29 Geo. Wash. L. Rev. 110 (1960) (tracing the history of fraudulent procurement and pointing to the continuing lack of standards to measure conduct before the Patent Office).

¹⁵ See infra note 230.

are forever lost.¹⁶ These latter remedies are closely circumscribed by constitutional law, and are infrequently deemed appropriate in antitrust decrees.¹⁷

Despite its value in supporting a public policy that seeks to remedy patent fraud, ¹⁸ courts hearing Walker Process ¹⁹ type antitrust suits do not employ the compulsory royalty-free licensing remedy as often as expected, given the tone of antitrust jurisprudence in the 1960s. ²⁰ As suggested earlier, the reason for this may lie, in general, in the cyclical, political nature of the Justice Department's antitrust efforts, ²¹ or in the inevitable limits of agencies such as the FTC. ²² The dearth of royalty-

- 16 See infra note 48 (describing the implications of cancellation).
- 17 See, e.g., infra note 128 and accompanying text.
- 18 Preventing the enforcement of fraudulently obtained patents serves the public interest by protecting the integrity of the patent issuing process. *See* Smith Int'l, Inc. v. Hughes Tool Co., 759 F.2d 1572, 1578 (Fed. Cir. 1985).
- ¹⁹ Walker Process Equip., Inc. v. Food Mach. & Chem. Corp., 382 U.S. 172 (1965) (This established the principle that patent fraud could serve as the basis for an antitrust claim and is discussed at *infra* notes 157-65 and accompanying text.).
- 28 For cases raising but denying Walker Process claims, see, for example, Glaverbel Societe Anonyme v. Northlake Mktg., 45 F.3d 1550 (Fed Cir. 1995); Carroll Touch, Inc. v. Elector Mechanical Sys., Inc., 15 F.3d 1573 (Fed. Cir. 1993); Technicon Instruments Corp. v. Alpkem Corp., 866 F.2d 417 (Fed. Cir. 1989); Burlington Indus., Inc. v. Dayco Corp., 849 F.2d 1418 (Fed. Cir. 1988); Argus Chem. Corp. v. Fibre Glass-Evercoat Co., 812 F.2d 1381 (Fed. Cir. 1987); Kimberly Clark Corp. v. Johnson & Johnson, 745 F.2d 1437 (Fed. Cir. 1984); E.I. duPont de Nemours v. Berkley & Co., Inc., 620 F.2d 1247 (8th Cir. 1979); Norton Co. v. Carborundum Co., 530 F.2d 435 (3d Cir. 1976); Zenith Lab., Inc. v. Carter-Wallace, Inc., 530 F.2d 508 (3d Cir. 1976); Becton, Dickinson & Co. v. Sherwood Medical Ind., Inc., 516 F.2d 514 (5th Cir. 1975). See also Robert L. Harmon, Patents and the Federal CIRCUIT §9.5(a), at 355 (3d ed. 1994) (the [courts are] disinclined to uphold an inequitable conduct defense in the absence of truly egregious conduct"); WILLIAM C. HOLMES, INTELLEC-TUAL PROPERTY AND ANTIRUST LAW §15.02 (1997). There are very few decisions which have succeeded in imposing antitrust liability based upon the enforcement of fraudulently or inequitably procured patents. See Kearney & Trecker Corp. v. Cincinnati Milacron, Inc., 562 F.2d365, 372 (6th Cir. 1977) (same violation manifested intention . . . to the same degree as if the original patent had been procured by fraud"); Kearney & Trecker Corp. v. Giddens &oo Lewis, Inc., 452 F.2d 579, 595 (7th Cir. 1971), cert. denied, 405 U.S. 1066 (1972) (violationo of proscriptions against conflicts of interest involved "the same threat to the public interest asoo actual fraud' upon the Patent Office); Charles Pfizer & Co., Inc. v. FTC, 401 F.2d 574 (6thoo Cir. 1968), cert. denied, 394 U.S. 920 (1969); Arcade, Inc. v. Minnesota Mining & Mfg., Co., No. CIV-1-88-141, 1991 WL 429344 (E.D. Tenn., Jun. 7, 1991); Conceptual Eng'g Assocs., Inc. v. Aelectronic Bonding, Inc., 714 F. Supp. 1262 (D.R.I. 1989); SCM Corp. v. Radio Corp.oo of Am., 318 F. Supp. 433 (S.D.N.Y. 1970).oo
- 21 The years 1981 to 1988 have been described as "a period of strong enthusiasm for protecting the interests and rewards of patentees," while the years 1989 to 1992 are thought of as a period of "virtual silence and inaction on the patent front." Baker & Sayler, supra note 2, at 120; see also infra notes 25, 31 and accompanying text.
- 22 Any administrative enforcement scheme that seeks to remove the benefits of the patent system will naturally meet corporate resistance. Such resistance tends to be unusually effective before administrative agencies for reasons that may be implied from the following quotation, which appears in many critical discussions of regulatory commissions:

The [LC.C.] is, or can be made, of great use to the railroads. It satisfies the popular clamor for a government supervision of railroads, at the same time that the supervi-

free licensing decrees in Walker Process litigation may also result from the fact that this remedy has most often been ordered in consent decrees.²³ Consent decrees rarely articulate any specific justification for remedies invoked, and, because they are essentially settlements, are rarely reviewed or approved by the United States Supreme Court. Thus, they leave the bench and bar with little sense of when the remedy should be pursued in similarly litigated matters.²⁴ Regardless of the reasons, itee is fair to say that the growing incentive (and trend) toward inequitable conduct before the Patent Office will not be impeded in any meaningful way by historically mercurial, national antitrust enforcement policies.

Actually, antimust enforcement in the United States during the twentieth century may be divided into two distinct eras——the 1920-1980 "traditional" period and the post-1980 "modern" period.²⁵ Patents were

sion is almost entirely normal. Further, the older such a commission gets to be, the more inclined it will be found to take the business and railroad view of things MARVEN H. BERNSTEIN, REGULATING BUSINESS BY INDEPENDENT COMMISSION 265 (1955) (quoting a letter written by Richard Olney in 1892 to President Perkins of the Chicago, Burlington and Quincy R.R.).

With regard to the FIC, in particular, a trend which began around 1970 and which continues to develop in the federal courts "appears to undermine the substantial authority of [that agency]." Jeffrey H. Leibling, Judicial Usurpation of the F.T.C.'s Authority: A Return to the Rule of Reason, 30 J. Marshall. L. Rev. 283, 308 (citing Casewell O. Hobbs III, The Federal Trade Commission and the Federal Trade Commission Act, in Antiquest Advisor 340, 345 (1985)). Courts have been reversing important FTC findings and have resorted to a more restrictive reading of the FTC's authority under Section 5. See, e.g., E.I. duPont de Nemours & Co. v. FTC, 729 F.2d 128 (2d Cir. 1984); Official Airline Guides v. FTC, 630 F.2d 920 (2d Cir. 1980); Boise Cascade Corp. v. FTC, 637 F.2d 573 (9th Cir. 1980). This curtailment of the FTC's Section 5 authority is inconsistent with pre-1980s case law and Congress's goals in creating the FTC. See Leibling, supra, at 309 (citing Hobbs, supra, at 346-53). "If courts continue to disregard the broad level of discretion that Congress vested in the F.T.C., they will effectively strip the F.T.C. of most of its administrative powers and reduce the agency to little more than an investigative tool . . . " Id. at 284.

- 23 See infra notes 257-58 and accompanying text.
- 24 It would seem that prior consent judgments "should be influential in subsequent litigation involving the same industry." EARL W. KINTNER, FEDERAL ANTITRUST LAW §40.8, at 122 (1984) (citing United States v. Aluminum Co. of Am. (Rome Cable), 1967 Trade Cas. (CCH) ¶ 71,980, at 83,472 (N.D.N.Y. 1966)). However, "the circumstances surrounding such negotiated agreements are so different that they cannot be persuasively cited in a litigation context." Id.
- 25 See Baker & Sayler, supra note 2, at 117-20 (breaking the traditional period into 1920 to 1965 and 1965 to 1980aperiods). In the traditional period nine 'No-Nos' were established as per se unlawful regarding patents and antitrust laws: tying, grantbacks, exclusive dealing, exclusive patent grants, package licenses, end-product royalties, restricting sales of products produced under a process patent license, and minimum prices for licensed products. See Charles F.Rule, Patent-Antitrust Policy: Looking Back and Ahead, 59 Antitrust L.J. 729 (1991). Alloo nine "no-nosă had more or less disappeared by the end of the Reagan Administration. See id. This was largely due to the fact that, during the 1970s, courts began to challenge aggressiveoo antitrust enforcement as a result of the influence of "Chicago schoolă antitrust thinking. See, e.g., Ward Bowman, Patent and Antitrust Law 254-55 (1973). In fact, "[by] the timeoo Ronald Reagan was elected in 1980, the Supreme Court's antitrust jurisprudence of the 1960soo was widely considered to be intellectually bankerupt." Edwin J. Hughes, The Left Side of Anti-

viewed with skepticism during the traditional period. They were considered potentially dangerous monopolies to be narrowly construed.²⁶ The modern approach, however, is to view patents as property rights which must be preserved because they are essential to an efficient free market economy.²⁷ This approach, which is more protective of patent owners, is even more frequently advanced as a result of the formation of the Court of Appeals for the Federal Circuit in the early 1980s.²⁸ Throughout the 1980s, the non-enforcement policies of the Reagan and Bush administrations severely muted the effect of the antitrust laws.²⁹ There is "little doubt [, therefore,] that patent abuse [, including patent fraud,] remains a serious antitrust concern, and [that there continues to be a] need for judicious application of antitrust law in the patent area."³⁰

trust: What Fairness Means and Why It Matters, 77 Marq. L. Rev. 265,271 (citing Interview with William E. Baxter, Assistant Attorney General Antitrust Division, 52 Antitrust L.J. 23, 42 (1983)).

²⁶ "The patent monopoly granted by Congress was not to be treated as a carte blanche to impose contractual terms which happened to be privately profitable to the patent holder." Baker & Sayler, *supra* note 2, at 124-25. *See also* Mercoid Corp. v. Mid-Continent Co., 320 U.S. 661, 665 (1944) (The limits of a patent grant should be "narrowly and strictly confined in order to avoid the "evils of expansion" of the patent monopoly through private contracts.)

27 See Baker & Sayler, supra note 2; see also Martin J. Adelman, Property Rights Theory and Patent Antitrust: The Role of Compulsory Licensing, 52 N.Y.U. L. Rev. 977, 980 (1977) ("[The features of patent rights as property] and the problems they engender indicate that application of a property rights theory to the patent area does not support a policy of unrestrained exploitation. Rather, such an application suggests that . . . restrictions on the patentee's monopoly power, like compulsory licensing, would be consistent with the character of patents as property.").

28 The Court of Appeals for the Federal Circuit ("CAFCa") has maintained a decidedly pro-patent stance. The CAFC was created in 1982 because it was thought that one court with exclusive jurisdiction over patent appeals would promote a consistent interpretation of the law. See Ellen E. Sward & Rodney F. Page, The Federal Courts Improvement Act: A Practitioner's Perspective, 33 Am. U. L. Rev. 385, 387-88 (1984). The variations in the interpretation of patent law prior to 1982 had led to forum shopping, discouraged innovation, and made business planning difficult. See id. at 387. The CAFC, however, has proven itself to be pro-patent. From 1982 through 1987 the CAFC upheld 89 percent of the district court decisions finding a patent valid and reversed 45 percent of the decisions rejecting a patent. See Alexander E. Silverman, Comment, Intellectual Property Law and the Venture Capital Process, 5 High Tech. L.J. 157, 161-62 (1990). Pre-CAFC courts upheld only 30 to 40 percent of the decisions holding patents valid. See id. at 162. In addition, the CAFC recognizes as binding precedent the decisions of the Court of Claims and the Court of Customs and Patent Appeals, two pro-patent courts. See id; see also, Hughes, supra note 25. Unfortunately, "the uniformityo that the creators of the CAFC originally sought actually transformed the strongest protective aspects of the patent system into weapons for offensive use against legitimate corporate competition." Michael Paul Chu, An Antitrust Solution to the New Wave of Predatory Patent Infringement, 33 Wm. & MARYd.. Rev. 1341, 1351-52 (1992).

29 "'In many respects, the past twelve years have been the worst of times for American antitrust laws.'" Baker & Sayler, *supra* note 2, at 109 (quoting E. Fox & R. PITOFSKY, ANTITRUST POLICY, CHANGING AMERICA: BLUEPRINTS FOR THE NEW ADMINISTRATION (1993)).

30 Kevin J. Arquit, Patent Abuse and the Antitrust Laws, 59 ANTIRUST L.J. 739, 739 (1991).

There had been some signs that the present administration might initiate yet another reversal in the direction of national antitrust policy; early commentators noted their anticipation of a more active future enforcement policy in the current Justice Department, particularly in the area of fraudulent procurement of patents.³¹ A recent head of the Antitrust Division seemed to be inclined toward this kind of activism.³²⁰⁰

With the hope that renewed focus on this critical problem might follow, this article reviews the historic interface between patent and antitrust law in Parts I and II, the contexts in which fraudulently procured patents have become an antitrust problem in Part III, and the evolution of antitrust remedies seeking to impose limits on the enforcement of patents procured through fraud or inequities in the Patent Office in Part IV. In Part V, royalty-free licensing is contrasted with compulsory patent licensing for royalties, divestiture, and dedication in terms of the utility and standards for imposition of such remedies. Finally, in Part VI, the public policies served by royalty-free licensing for patent fraud and the circumstances under which this uniquely valuable remedy serves those policies through consent decrees or when imposed in antitrust litigation are identified.

The conclusions that seem to follow are: (1) that a means must be found to increase judicial receptivity to patent-antitrust claims, because patents are increasingly more likely to be fraudulently procured, often in violation of the antitrust laws;³³ and (2) that compulsory royalty-free pat-

31 See Baker & Sayler, supra note 2, at 110-11. But see Stephen P. Reynolds, Antitrust and Patent Licensing: Cycles of Enforcement and Current Policy, JURIMETRICS, Winter 1997, at 129, 146:

The scarcity of Supreme Court decisions on the antitrust implications of technology licensing during the past 20 years makes for uncertainty. Nevertheless, the Clinton Administration's words and actions suggest that Department of Justice views on the substantive law are much closer to those of the Bush and Reagan years than to the aggressive positions taken by earlier generations.

This may be the result of the fact that major changes in DOJ policy may be unlikely. Antitrust budgets are likely to decline; U.6. intellectual property continues to be an important source of foreign exchange earnings; and technical innovations are important sources of competitive advantage for the types of industries the Clinton administration has supported. See Baker & Sayler, supra note 2, at 110.

- ³² The Perils of a Pushy Antitrust Policy, Chi. Trib., Sept. 13, 1993, at 14N ("President Clinton's chief trustbuster has served notice that she's ending the laissez faire antitrust policy of the Reagan and Bush years.").
- ³³ Fraudulently procuring a patent is not a *per se* antimust violation; specific intent is also needed for an attempt to monopolize charge. *See* Allen Archery, Inc. v. Browning Mfg. Co., 819 F.2d 1087 (Fed. Cir. 1987); American Hoist & Derrick Co. v. Sowa & Sons, Inc., 725 F.2d 1350, 1363 (Fed. Cir.), *cert. denied*, 469 U.6. 821 (1984); HARMON, *supra* note 5, § 11.3,00 at 460-61:00

Under Walker Process the maintenance and enforcement of a patent procured by knowing and willful fraud may meet the intent and conduct elements of violation of the Sherman Act, provided that the ability to lessen or destroy competition, including market power in the relevant market, can also be shown. ent licensing is an important, relatively effective, yet under-utilized means of protecting the public and the free market, especially given the decreasing government resources available to counter abuses of the patent system. Many of the public interests protected by antitrust enforcement would be much better served if a greater number of Walker Process claims were to be sustained and if compulsory royalty-free licensing were more widely accepted and imposed.

I.eePATENTS AND THE LIMITS OF ENFORCEMENT •e

Holders of valid letters-patents enjoy... the exclusive right and liberty of making and using the invention therein secured, and of vending the same to others to be used...; and the rule of law is well settled, that an invention so secured is property in the holder of the patent, and that as such the right of the holder is as much entitled to protection as any other property, during the term for which the franchise or the exclusive right or privilege is granted.³⁴

Patents allow for the exclusive use of inventions for a time, but they are not granted solely to facilitate the accumulation of private profit. The primary objective of patent grants is that the public can benefit from invention.³⁵ This is difficult to achieve, however, where there are financial incentives to obtain patents by any means, including fraud (or what is now characterized as "inequitable conduct")³⁶ before the Patent Office, and patent applications may not actually represent genuine invention or

^{. . .} A bare allegation that a patentee obtained a patent through inequitable conduct does not establish a violation of the Sherman Act.

See also Spectrum Sports v. McQuillan, 506 U.S. 447, 455-56 (1993) (reiterating in dicta that, as in Walker Process, antitrust plaintiff's claiming patent abuses must still allege and prove a relevant market, and that one cannot presume that a patent itself defines a relevant market); Atari Games Corp. v. Nintendo of Am., Inc., 897 F.2d 1572 (Fed. Cir. 1990).

³⁴ Cammeyer v. Newton, 94 U.S. 225, 226 (1876) (patent infringement suit involving an improvement patent for a portable and adjustable still-water dam).

³⁵ See Motion Picture Patents Co. v. Universal Film Mfg. Co., 243 U.S. 502, 510-11 (1917). "While one great object [of our patent laws] was, by holding out a reasonable reward to inventors, and giving them an exclusive right to their inventions for a limited period, to stimulate the effects of genius; the main object was to promote the progress of science and useful arts." Id. (quoting Pennock v. Dialogue, 2 Pet. 1 (1829)). Patent rights also serve the public interest by encouraging investment-based risks, new jobs, new industries, new consumer goods, and trade benefits. See Harmon, supra note 5, § 1.2, at 8 (citing Locate Corp. v.eVetrascal Ltd., 781 F.2d 861 (Fed. Cir. 1985)); see also Mercoid Corp. v. Mid-Continentee Investment Co., 320 U.S. 661, 665 (1944) ("It is the public interest which is dominant in the patent system.").ee

³⁶ See infra note 63 for a description of that which constitutes inequitable conduct.

advancement of "science and the useful arts." Such incentives clearly exist where "[b]usiness—growing bigger and bigger each decade—[can] fasten its hold more tightly on the economy through the cheap spawning of patents and [use] one monopoly to beget another through the leverage of key patents." 3800

Consequently, because of the potentially enormous destructive economic impact of such anticompetitive behavior, courts enforce the principle that *any* attempt to enlarge the monopolized domain beyond the narrow patent claim will deprive a patentee of all rights to enforce its franchise until the consequences of any illegal extension are fully dissipated.³⁹ Thus, courts of equity will withhold assistance in infringement suits or suits for royalties until it can be shown that improper anticompetitive practices have been abandoned.⁴⁰ Such practices may also include

³⁷ Motion Picture Patents Co., 243 U.S. at 511 (the proper goal of patents is to "'promote the progess of science and useful arts.'") (quoting U.S. Const. art. I, § 8); see also infra note 311.

³⁸ Automatic Radio Mfg. Co. v. Hazeltine Research, Inc., 339 U.S. 827, 837 (1950) (Douglas and Black, JJ., dissenting) (citing Justices Brandeis and Stone). Justice Douglas highlighted the problem of tying the licensing of patented articles to the condition that other unpatented articles be purchased, a practice which effectively enlarges the protections of the patent system beyond its intended purpose. See id.

39 In Motion Picture Patents Co., 243 U.S. 502 (1917), the Supreme Court overruled Henry v. A.B. Dick, 224 U.S. 1 (1912) and created the "patent misuse" doctrine. Patent "misuse" encompasses patentees utilizing valid patents beyond the scope of their claims. See J. Thomas McCarthy, A Patent Licensing Policy for Minimizing Antitrust and Misuse Risks, 46 J. Pat. Off. Soc'y 547, 574 (1964). The "patent misuse" doctrine was created to deny relief for patent infringement to a patentee "if he has attempted illegally to extend the scope of his patent monopoly." Dawson Chem. Co. v. Rohm & Haas Co., 448 U.S. 176, 180 (1980); see also United States v. Univis Lens Co., 316 U.S. 241, 251-52 (1942) (holding that efforts to control prices of a patented article after the patentee's first vending of the patented article were an inappropriate extension of the patent monopoly). Examples of patent misuse also include tying arrangements, conditional licensing agreements, patent pooling, and some cross licensing arrangements. See John M. Bloxom IV, Comment, On the Convergence of the Patent and Antitrust Statutes: SCM Corp. v. Xerox Corp., 39 Wash. & Lee L. Rev. 245, 256 (1982). The defense of patent misuse renders the patent unenforceable regardless of the validity of the patent. See Joel R. Bennett, Patent Misuse: Must an Alleged Infringer Prove an Antitrust Violation, 17 AIPLA Q.J. 1, 7 (1989) (citing Morton Salt Co. v. G.S. Suppiger, 314 U.S. 488 (1942)). The infringer need not even prove that it in fact was harmed. See Morton Salt, 314 U.S. at 493-94.

40 The "patent misuse" doctrine remains in effect until the misuse is discontinued and the effects are dissipated. Byron A. Bilicki, Standard Antitrust Analysis and the Doctrine of Patent Misuse: A Unification Under the Rule of Reason, 46 U. Pitt. L. Rev. 209, 214 (1984). In some instances, this unenforceability may provide a windfall for a wrongdoer (the infringer). See Robert J. Hoerner, Patent Misuse, 53 Antitrust L.J. 641, 647 (1985) (suggesting that in order to avoid the harshness of the patent misuse doctrine the courts should hold the misusing clause unenforceable rather than the entire patent); see also Mark A. Lemley, The Economic Irrationality of the Patent Misuse Doctrine, 78 Cal. L. Rev. 1599, 1619 (1990) (arguing that the effect of the "patent misuse doctrine is to unfairly create a scheme of compulsory royalty free licensing where a patentee is guilty of misuse and an unhamned infringer is unnecessarily rewarded). Legislation and cases limited the patent misuse doctrine during the 1980s. See generally Hoerner, supra; J. Diane Brinson, Patent Misuse: Time for a Change, 16 Rutgers

fraud or inequitable conduct before the Patent Office,⁴¹ offenses which are of greater consequence because they call into question the legitimacy of the patent itself, regardless of whether the patent can be shown to be part of a scheme to violate the patent or antitrust laws.

A.eePatent Fraud

Ordinarily, a patent issued by the United States Patent and Trademark Office is presumed valid.⁴² That presumption, however, is not conclusive.⁴³ Where a patent is obtained by fraud, the Attorney General may file suit for cancellation,⁴⁴ which is a request for revocation of the

COMPUTER & TECH. L.J. 357 (1990); L. Peter Faskes, Can a Patent Still be Misused?, ANTI-TRUST L.J. 677 (1991); Robert J. Hoerner, Patent Misuse: Portents for the 1990s, 59 ANTI-TRUST L.J. 687 (1991). The Patent Misuse Reform Act of 1988, for example, limited patent misuse defenses, specifically in tying arrangements. See Lemley, supra, at 1624. Tying arrangements exist when the patent licensor conditions the grant of the license on the licensee purchasing property which is not the subject of the patent nor covered by its claims. See Thomas V. Heyman, Patent Licensing and the Antitrust Laws - A Reappraisal at the Close of the Decade, 14 Anthrust Bulletin 537, 640 (1969); Comment, Coercive Patent Packaging - The Need for a Rule of Reason, 14 Wm. & Maryd., Rev. 748, 754-55 (1973) (discussing Hazeltine Research, Inc. v. Zenith Radio Corp., 388 F.2d 25 (7th Cir. 1967) (where the Seventh Circuit held that the coerced patent packaging, analyzed as a standard tying arrangement, was a misuse per se)); see also Morton Salt Co. v. G. S. Suppiger Co., 314 U.S. 488 (1942) (patentee was denied patent protection for infringement of salt dispensing equipment because of its practice of licensing the use of the equipment on the purchase of salt exclusively from the patentee). "The patentee, like . . . other holders of an exclusive privilege granted in the furtherance of a public policy, may not claim protection of his grant by the courts where it is being used to subvert that policy. 8 Id. at 494. The statute, 35 U.S.C. § 271(d), now 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: . . . (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.

The "market power" requirement now institutes an intermediate standard between the previous per se rule and the proposed Senate requirement of an antitrust violation. See, e.g., Kenneth J. Burchfield, Patent Misuse and Antitrust Reform: "Blessed Be the Tie?,3' 4 HARV. J.L. & TECH. 1, 26 (1991).

- ⁴¹ See infra notes 52, 64a65. Inequitable conduct is a defense under section 282 of the Patent Code, rendering all claims unenforceable. See J.P. Stevens v. Lex Tex Ltd., 747 F.2d 1553, 1559-60 (Fed. Cir. 1984).
 - 42 See infra note 64.00
- 43 Since the adoption of the first patent act in 1790, Congress and the courts have consistently permitted judicial review of patents originally obtained in ex parte proceedings in the PTO. HARMON, supra note 5, § 1.2, at 9, see also E.I. duPont de Nemours & Co. v. Berkley & Co., 620 F.2d 1247, 1266 (9th Cir. 1979) ("The presumption is not conclusive and can be rebutted by proof the PTO erredő); Floridin Co. v. Attapulgus Clay Co., 35 F. Supp. 810, 814 (D. Del. 1940), aff'd, 125 F.2d 669 (3d Cir. 1942).
- 44 There are two stages at which fraudulent patent claims may be attacked. One is between the filing of the application and the issuance of the patent, accomplished through interferences. The second is during the life of the issued patent. Federal district courts do not have

patent by virtue of the general equity powers of the judiciary.⁴⁵ Suits for cancellation became viable after 1888, when the United States was allowed to sue the American Bell Telephone Company alleging that the patent for Alexander Graham Bell's telephone had been fraudulently obtained.⁴⁶ The government claimed Bell had actually acquired the ideas of a competitor.⁴⁷ In addressing the standing of the United States to sue, the Supreme Court concluded that nothing prohibited the government from moving to cancel wrongfully procured patents, that no inference to that effect could be drawn from the fact that accused infringers may also raise the defense of invalidity.⁴⁸ Subsequent decisions, of course, have emphasized the need for proof of fraud or misrepresentation in suits for cancellation since the Court will not entertain mere challenges to the dis-

original jurisdiction to conduct interferences; these procedures are initially conducted in the Patent Office. Consolidated World Housewares, Inc. v. Finkle, 831 F.2d 261, 265 (Fed. Cir. 1987); see also General Instrument, Corp. v. Scientific-Atlanta, Inc., 995 F.2d 209 (Fed. Cir. 1993) (discussing patent office interference proceedings). If an interference is not charged, the Commissioner of Patents is the one who must challenge pending applications. See Peter D. Rosenberg, The Assertion of a Fraud Upon The Patent Office as a Means of Defeating the Patent Monopoly, 50 J. Pat. Off. Soc'y 455, 460-61 (1968). Subsequent to the issuance of a patent, the Attorney General must take the initiative.

cretionary decisions of the Patent Office.⁴⁹ Nevertheless, if the PTO has been induced to allow a new patent over a prior patent by intentional misrepresentation, the government may sue to cancel⁵⁰ even though a

45 See United States v. American Bell Tel. Co., 128 U.S. 315 (1888).

There is nothing in these provisions expressing an intention of limiting the power of the government of the United States to get rid of a patent obtained from it by fraud and deceit. And although the legislature may have given to private individuals a more limited form of relief . . . we think the argument that this was intended to supersede the affirmative relief to which the United States is entitled, to obtain a cancellation or vacation of an instrument obtained from it by fraud . . . is not sound.

Id. at 373; see also United States v. Saf-T-Boom Corp., 431 F.2d 737 (7th Cir. 1970) (patent fraud invoked as the basis for cancellation of an issued patent); Mowry v. Whitney, 81 U.S. 434 (1871) (there is no right in a private party to cancel a patent on the ground of fraudulent obtainment).

- ⁴⁶ See American Bell Tel. Co., 128 U. 315.
- ⁴⁷ See id. at 353.
- 48 See id. at 373.

[T]he suit of the government, if successful, declares the patent void, sets it aside asoo of no force, vacates it or recalls it, and puts an end to all suits which the patentee can bring against anybody. It opens to the entire world the use of the invention or discovery in regard to which the patentee had asserted a monopoly.oo *Id.* at 372.

⁴⁹ See e.g. United States v. American Bell Tel. Co., 167 U.S. 224 (1897). Least of all was it intended to be affirmed that the courts of the United States, sitting as courts of equity, could entertain jurisdiction of a suit by the United States to set aside a patent for an invention on the mere ground of error of judgment on the part of the patent officials. *Id.* at 269.

50 "[Patent] applications [have] been set aside by the government based upon fraudulent statements or exhibits, even where the applicant may have otherwise been emitted to the patent." 7 von Kalinowski, supra note 5, §59.05(2)(a)(ii), at 59-55 (citing, interalia, Ex parte Mallard, 71 U.S. P.Q. 294 (1946)). Some critics, however, have emphatically argued that

defense of invalidity may also be available in a private infringement suit.⁵¹

Actually, accused infringers have not always been allowed to assert this defense of invalidity. In fact, soon after the Civil War, in *Rubber Co. v. Goodyear*, ⁵² the Supreme Court held that courts could not review errors not obvious on the face of a patent. ⁵³ That view was subsequently abandoned, ⁵⁴ however, and defendants were eventually allowed to assert invalidity by reason of *materially* false statements ⁵⁵ made in obtaining the patent or a related patent. ⁵⁶ Then, toward the end of World War II, in

courts should not be invalidating patents issued by the United States Patent Office at all. See Howard I. Forman, Patent/Antitrust Ecology v. National Prosperity, 55 J. PAT. OFF. Soc'y 86 (1973) (promoting a 'utilization theory' of patents and suggesting that the solution to the waste created by courts invalidating patents, without regard to national prosperity, is to have an incontestible period which a patentee may elect after five years in exchange for a shortening of the viable period of the patent).

51 See Driscoll v. Cebalo, 731 F.2d 878, 2884 (Fed. Cir. 1984) (a patent procured by fraud or inequitable conduct is unenforceable). The violation of the duty to disclose material information to the Patent Office when applying for a patent, however, also constitutes inequitable conduct and renders even a patent which is otherwise valid unenforceable. See Brunswick Corp. v. United States, 34 Fed. Cl. 532,692 (1995). The standard for materiality is whether a reasonable patent examiner would have considered the withheld information important in deciding whether to issue the patent. See Brunswick Corp., 34 Fed. Cl. at 592-93. However, the materiality of the omitted information alone does not determine a breach of this duty of candor. A finding of intent to violate the duty of candor, which is also required, will not be inferred merely from a finding of materiality. See Schlering Corp. v. Optical Radiation Corp., 867 F.2d 616,618 (Fed. Cir.), cert. denied, 483 U.S. 813 (1989). The two elements of inequitable conduct, materiality and intent, are considered on a sliding scale such that a strong showing of either may compensate for a mere threshold showing of the other. See Brunswick Corp., 34 Fed. Cl. at 592. Proof of fraud or inequitable conduct must be clear and convincing, but will be reviewed under an abuse of discretion standard. See id. But see Coming Glass Works v.oAnchor Hocking Glass Corp., 253 F. Supp. 461 (D. Del. 1966) (suggesting the remedy of oo patent unenforceability for inequitable conduct such as intentional misrepresentations, even ifoo immaterial).

- 52 76 U.S. 788 (1869).
- 53 Id. at 797.
- ⁵⁴ See Mahn v. Harwood, 112 U.S. 354 (1884) (a court has a right and a duty to declare a patent reissue *pro tanto* void where commissioner has exceeded his power).
- 55 See Corona Cord Tire Co. v. Dovan Chemical Corp., 276 U.S. 358 (1928) (mere misstatements to the Patent Office were held not material and did not destroy the presumption of validity).
- See id. at 819. The suit before the Court was brought to enforce the agreements and the patents. The suit before the Court set and the patents. The suit before the Court set and the patents. The suit before the Court stated that "courts of equity do not make quality of suitors the test. They apply the maxim requiring clean hands only where some unconscionable act of one coming for relief has immediate and necessary relation to the equity that he seeks in respect of the matter in litigation. Id. at 245. Likewise, in Precision Instrument Mfg. Co. v. Automotive Maintenance Mach. Co., 324 U.S. 806 (1945), the Court held the three Automotive patents-in-suit unenforceable for unclean hands. See id. at 819. After discovering that Precision Instrument's asserted inventor filed false dates of invention, Automotive settled an interference without notifying the Patent Office of the inequitable conduct. See id. at 818-19. The settlement agreement acknowledged the validity of the claims and required that all rights in the patents be assigned to Automotive. See id. at 819. The suit before the Court was brought to enforce the agreements and the patents.

Hazel-Atlas Glass Co. v. Hartford-Empire Co.,⁵⁷ the Court finally held that the total effect of a patent fraudulently procured and wrongfully enforced should result in a complete denial of relief for the claimed infringement.⁵⁸ "The public welfare demands that the agencies of public justice be not so impotent that they must always be mute and helpless victims of deception and fraud."⁵⁹ A year later, in Precision Instrument Mfg. Co. v. Automotive Maintenance Mach. Co.,⁶⁰ the Court explained that: "[t]he far reaching social and economic consequences of a patent give the public a paramount interest in seeing that the patent monopolies do not spring from fraud or other inequitable conduct .a,a.a."⁶¹

As a result of these decisions, the doctrine of "unclean hands" is now invoked to prevent wrongdoers during the patent procurement process from enjoying the fruits of such transgressions and to prevent injury to the public.⁶² Today, proof of deliberate misrepresentation with almost any degree of certainty will allow the successful assertion of this doctrine by defendants in infringement suits.⁶³

See id. at 806. The Court stated that "[t]he history of the patents and contracts in issue is steeped in perjury and undisclosed knowledge of perjury." Id. at 816. The Court followed Keystone Driller and determined that Automotive's inequitable conduct was in not disclosing to the PTO that the false affidavit affected the entire cause of action and justified dismissal under the unclean hands doctrine. See id. at 814-15, 819.

- 57 322 U.S. 238 (1944).
- 58 Id. at 250. The patent in Hazel-Atlas was obtained by practicing fraud on the Patent Office. To overcome cited prior art, "experts" were enlisted by Hartford and their lawyers to publish an article stating that the invention was a remarkable advance in the art. See id. at 240. This publication was later offered to the Third Circuit Court of Appeals to reverse a decision in an infringement action. See id. at 241. Nine years later, after discovering the fraud, the Court of Appeals denied the infringer's petition for a review on the grounds that the fraud was not newly discovered; it was not the primary basis of its earlier decision; and the court did not have the capacity to set aside the decision. See id. at 243-44. The Supreme Court reversed the Third Circuit and ordered it to direct the trial court to set aside the judgment. See id. at 251. The Court stated that fraud, especially in a patent case, is a matter of public concern, with effects extending beyond the parties to the litigation. See id. at 246; see also Molins PLC v. Textron, Inc., 48 F.3d 1172, 1178-82 (Fed. Cir. 1995) (denying enforcement of a patent in an infringement action because a failure to disclose a prior art reference known to applicant's patent agent and cited by foreign patent officials in denying foreign applications was a material non-disclosure with a specific intent and thus constituted inequitable conduct); Pollenex Corp. v. Sunbeam-Home Comfort, 835 F. Supp. 394 (N.D. Ill. 1993) (patent held unenforceable due to inequitable conduct during patent application process which involved a material concealingoo of prior art used in conception and development of a patented product which a reasonableoo examiner would have thought important to the decision to issue the patent).oo
 - 59 Hazel-Atlas Glass Co., 322 U.S. at 246.
 - 60 324 U.S. 806 (1945).
 - 61 Id. at 816.
- 62 See id. at 815. In Hazel-Atlas, a plaintiff procured a settlement of an interference suit, acquiesced in obscuring relevant data in the Patent Office, obtained the patent, and then barred other parties from questioning its validity. Hazel-Atlas, 322 U.S. at 251. The patent was held unenforceable. See id.
 - ⁶³ The concept of inequitable conduct in patent procurement derives from the equitable doctrine of unclean hands: that a person who obtains a patent by intentionally

B. THE INERINGERS' DEFENSE OF INVALIDITY

In addition to the judicially created defense of "inequitable conduct" before the Patent Office, which renders the patent unenforceable, infringers also have a statutory right to assert the invalidity of the patent which is the predicate of the infringement action.⁶⁴ This defense may be based

misleading the PTO can not enforce the patent. Inequitable conduct may be held although the common law elements of fraud are absent. To achieve a just application of this penalty in the variety of situations that may arise, this court established a balancing test in American Hoist & Derrick Co. v. Sowa & Sons, Inc., 725 F.2d 1350 (Fed. Cir.), cert. denied, 469 U.S. 821 (1984), whereby the materiality of the information that was not provided to the PTO is weighted against the intent of the actor. The court is charged with reaching an equitable result in view of the particular circumstances of the case.

Demaco Corp. v. Von Langsdorff Licensing Ltd., 851 F.2d 1387, 1394 (Fed. Cir. 1988). To establish inequitable conduct, however, an intent to deceive is required. See RCA Corp. v. Data General Corp., 887 F.2d 1056, 1065 (Fed. Cir. 1989). A finding of intentto deceive may follow from an assessment of materiality, knowledge, and surrounding circumstances, including evidence of good faith. However, a declaration of lack of intent to deceive the PTO is not sufficient to preclude a summary judgment on the issue of inequitable conduct. See Paragon Podiatry Lab., Inc. v. KLM Lab., Inc., 984 F.2d 1182 (Fed. Cir. 1993). "Conduct before the PTO that may render a patent unenforceable is broader than 'common law fraud.' & Kingsdown Med. Consultants Ltd. v. Hollister Inc., 863 F. 2d 867, 876 (Fed. Cir.), cert. denied, 490 U.S. 1067 (1989); see also Pro Mold and Tool Co., Inc. v. Great Lakes Plastics, Inc., 75 F.2d 1568 (Fed. Cir. 1996); Fox Indus., Inc. v. Structural Preservation Sys., Inc., 922tF. 2d 801 (Fed. Cir. 1990). Such conduct may include "failure to disclose material information, or submission of false material information, with an intent to mislead." See J.P. Stevens & Co. v. Lex Tex Ltd., 747 F.2d 1553, 1559-60 (Fed. Cir. 1984) (inequitable conduct is a defense under section 282 of the Patent Code rendering all claims unenforceable), cert. denied, 474 U.S. 822 (1985); see also Argus Chemical Corp. v. Fibre Glass-Evercoat Co., 759 F. 2d 10 (Fed. Cir. 1984), cert. denied 474 U.S. 903 (1985) (patents unenforceable due to inequitable conduct); Refac Int' Iv. Lotus Dev. Corp., 887 F. Supp. 539 (S.D.N.Y. 1995) (patentee' ssubmission of affidavits to Patent Office during application process in which affiants attested to their belief that disclosure in patent application could teach them to make subject invention, while omitting information regarding affiant's prior employment by patentee as well as their contact with and knowledge of invention process, was inequitable conduct that rendered patent invalid). However, "'inequitable conductt requires proof by clear and convincing evidence of a threshold degree of materiality of the nondisclosed or false information . . o [and it] requires proof of . . . intent (even though) that intent need not be proven with direct evidence, "b J.P. Stevens, 747 F.2d at 1559-60. As stated in Gemveto Jewelry Co. v. Lambert Bros., Inc., 542 F. Supp. 933, oo 943 (S.D.N.Y. 1982):00

The gravamen of the fraud defense is that the patentee has failed to discharge his duty of dealing with the examiner in a manner free from the taint of "fraud or other inequitable conduct." If such conduct is established in connection with the prosecution of a patent, the fact that the lack of candor did not directly affect all the claims in the patent has never been the governing principle. It is the inequitable conduct that generates the unenforceability of the patent.

64 A patent shall be presumed valid. Each claim of a patent (whether in independent, dependent, or multiple dependent form) shall be presumed valid independently of the validity of other claims; dependent or multiple dependent claims shall be presumed valid even though dependent upon an invalid claim. The burden of establishing invalidity of a patent or any claim thereof shall rest on the party asserting such invalidity.

The following shall be defenses in any action involving the validity or infringement of a patent and shall be pleaded:

on either a *mistake* as to patentability or the willful, *fraudulent* procurement of a patent for an unpatentable discovery or invention. ^{65ee}

A finding of non-infringement at the conclusion of plaintiff's case, however, leaves unchallenged the presumption of patent validity, and thereby allows a plaintiff who might be the owner of an invalid patent to continue to assert, unchallenged, questionable rights against both competitors and the public. Public policy and judicial economy would seem better served, therefore, if patent validity were addressed *prior* to the issue of infringement. 66ee

- (1)e Noninfringement, absence of liability for infringement or unenforceability,
- (2) Invalidity of the patent or any claim in suit on any ground specified in part II of this title as a condition for patentability,ee
- (3)eInvalidity of the patent or any claim in suit for failure to comply with any requirement of sections 112 or 251 of this title,
- (4) Any other fact or act made a defense by this title.

In actions involving the validity or infringement of a patent the party asserting invalidity or noninfringement shall give notice in the pleadings or otherwise in writing to the adverse party at least thirty days before the wial, of the country, number, date, and name of the patentee of any patent, the title, date, and page numbers of any publication to be relied upon as anticipation of the patent in suit or, except in actions in the United States Claims Court [United States Court of Federal Claims], as showing the state of the art, and the name and address of any person who may be relied upon as the prior inventor or as having prior knowledge of or as having previously used or offered for sale the invention of the patent in suit. In the absence of such notice proof of the said matters may not be made at the trial except on such terms as the court requires.

35 U.S.C. § 282 (1981 & Supp. 1997).

65 See id.

66 This is not dissimilar from the public policy that impelled the Court in *Blonder-Tongue Lab. Inc. v. University of Ill. Found.*, 402 U.S. 313 (1970), to overrule its earlier decision in *Triplett v. Lowell*, 297 U.S. 638 (1936), which held that a judgment of invalidity was not *res judicata* against the patentee in subsequent litigation against a different defendant:

To the extent the defendant in the second suit may not win by asserting, without contradiction, that the plaintiff had fully and fairly, but unsuccessfully, litigated the same claim in the prior suit, the defendant's time and money are diverted from alternative uses—productive or otherwise—to relitigation of a decided issue. And, still assuming that the issue was resolved correctly in the first suit, there is reason to be concerned about the plaintiff's allocation of resources. Permitting repeated litigation of the same issue as long as the supply of unrelated defendants holds out reflects either the aura of the gaming table or a "lack of discipline and of disinterestedness on the part of the lower courts, hardly a worthy or wise basis for fashioning rules of procedure.

Blonder-Tongue, 402 U.S. at 329. Blonder-Tongue states that a patent owner is collaterally estopped by a prior judgment of invalidity unless it did not have "a fair opportunity procedurally, substantively and evidently to pursue his claim the first time." Blonder-Tongue, 402 U.S. at 333 (citing Eisel v. Columbia Packing Co., 181 F. Supp. 298, 301 (Mass. 1960)). Future competitors, therefore, are protected against being compelled to mount perpetual validity challenges, and judicial economy as well as public policy are served by findings of invalidity before any additional defendants are forced to defend what might often be anticompetitive infringement litigation.

The Supreme Court addressed this problem, essentially one of justiciability, in three early decisions.⁶⁷ In 1939, in *Electrical Fittings Corp. v. Thomas & Bett.s Co.*, ⁶⁸ the Court held that a non-infringing defendant could not compel an appellate court to *review* a finding of validity but could demand that the finding be *vacated*.⁶⁹ The Court reasoned that because invalidity had been raised as an affirmative defense rather than a counterclaim seeking a declaratory judgment, a ruling on validity would be unnecessary.⁷⁰ However, a few years later, in an infringement suit which did involve a counterclaim of invalidity seeking a declaratory judgment,⁷¹ the Court stated:

To hold a patent valid if it is not infringed is to decide a hypothetical case. But the situation in the present case is quite different. We have here not only bill and answer but a counterclaim. Though the decision of non-infringement disposes of the bill and answer, it does not dispose of the counterclaim which raises the question of validity [T]he issue of validity may be raised by a counterclaim in an infringement suit. . . . [W]e are of the view that the issues raised by the present counterclaim were justiciable and that the controversy between the parties did not come to an end on the dismissal of the bill for non-infringement, since their dispute went beyond the single claim and the particular accused devices involved in that suit.⁷²

⁶⁷ Compare Altvater v. Freeman, 319 U.S. 359 (1943), and Electrical Fittings Corp. v. Thomas & Betts Co., 307 U.S. 241 (1939), with Sinclair & Carroll Co. v. Interchemical Corp., 325 U.S. 327 (1945).

^{68 307} U.S. 241 (1939).

⁶⁹ A party may not appeal from a judgment or decree in his favor, for the purpose of obtaining a review of findings he deems erroneous which are not necessary to support the decree. But here the decree itself purports to adjudge the validity of claim 1, and though the adjudication was immaterial to the disposition of the cause, it stands as an adjudication of one of the issues litigated. We think the petitioners were entitled to have this portion of the decree eliminated o o

Id. att242.

⁷⁰ See id. In Deposit Guaranty National Bank v. Roper, 445 U.S. 326 (1980),

[[]t]he Court noted that the pennioners in Electrical Fittings retained a stake in the outcome of the case on appeal, despite a judgment of non-infringement in their favor at trial, because the presence of the patent invalidity issue kept the case alive, thereby avoiding dismissal under Article III. In a footnote, however, the Court stated that although the dismict court was correct in inquiring fully into the validity of the patent, the court erred in adjudging the patent valid after ruling that there had been no infringement, and that by doing so, the dismict court had decided a hypothetical controversy.

Ku & LaFuze, supra note 6, at 548-49 (citing Deposit Guaranty, 445 U.S. at 335-36 n.7).
71 See Altvater v. Freeman, 319 U.S. 359 (1943).

⁷² Id at 363-64 (emphasis added) (footnote omitted). Butsee Ku & LaFuze, supra note 6, at 547 ("Given the availability of the Declaratory Judgment Act... it appears that basing

In emphasizing the ongoing nature of the parties' dispute in *Altvater*, and by suggesting that such counterclaims ought to be resolved, the *Altvater* decision could be read to require that a counterclaim ought to be dismissed (or a judgment of invalidity vacated) unless the parties' dispute extends beyond the instant claim of infringement.⁷³⁰⁰

Sinclair & Carroll Co. v. Interchemical Corp.⁷⁴ presented an opportunity to clarify Electrical Fittings and Altvater. Sinclair concluded that, "of the two questions, [validity and infringement,] validity has the greater public importance, and [thus] the District Court [follows] what will usually be the better practice by inquiring fully into the validity of [the] patent [even in a case involving non-infringement]."⁷⁵ However,ee because the Court left unanswered the question of whether a court was required to rule on validity in the absence of infringement, the Court of Appeals for the Federal Circuit ("Federal Circuit"), since its inception, has routinely vacated declaratory judgments regarding patent validity following determinations of non-infringement.⁷⁶

In 1993, the Supreme Court addressed this practice in Cardinal Chemical Co. v. Morton Int'l Inc.⁷⁷ Maneuvering around its prior decisions, the Court noted that Electrical Fittings, unlike Altvater, did not involve a declaratory judgment, but Altvater did not necessarily answer the question of whether validity would be moot in the absence of an ongoing or continuing infringement dispute.⁷⁸ The Federal Circuit's practice of vacating judgments of invalidity on findings of non-infringement was therefore held consistent with prior precedent. However, the

the [Alwater] decision on the presence of additional claims in the counterclaim was both unnecessary and confusing.") (foomote omitted).

⁷³ See, e.g., Vieau v. Japax, Inc., 823 F.2d 1510, 1518-21 (Fed. Cir. 1987) (the controversy did not extend beyond the non-infringing actions and the court could exercise its discretion to dismiss a validity appeal); Fonor Corp. v. Johnson & Johnson Corp., 821 F.2d 627, 634 & n.2 (Fed. Cir. 1987), cert. denied, 484 U.S. 1027 (1988) (stating that a finding of non-infringement eliminated the case or controversy and the defendant's counterclaim merely repeated the affirmative defenses).

^{74 325} U.S. 327 (1945).

⁷⁵ Id. at 330 (citation omitted).

⁷⁶ Vieau, 823 F.2d 1510, and Fonar, 821 F.2d 627, are the "two cases that gave birth to the Federal Circuit's practice of routinely vacating judgments of invalidity after determining that the patent at issue was not infringed." Ku & LaFuze, *supra* note 6, at 549. However,

the Federal Circuit's practice injures not only the alleged infringer, and the public; it also may unfairly deprive the patentee itself of the appellate review that is a component of the one full and fair opportunity to have the validity issue adjudicated correctly. If, following a finding of noninfringement, a declaratory judgment on validity is routinely vacated, . . . the patentee may have lost the practical value of a patent that should be enforceable against different infringing devices.

Cardinal Chem. Co. v. Morton Int'I, Inc., 508 U.S. 83, 101-02 (1993); see also Ku & LaFuze, supra note 6, at 553-54, 560 (setting out public policy reasons for ruling on patent validity notwithstanding a finding of noninfringement).

^{77 508} U.S. 83 (1993).

⁷⁸ See id. at 95.

Supreme Court also held that in light of important policy considerations,⁷⁹ a finding of non-infringement alone is not a sufficient basis *peree* se for vacating a judgment of patent invalidity.⁸⁰

Cardinal Chemical, by narrowing a trial court's ability to circumvent the issue of patent validity on a finding of non-infringement, provides additional support for the public interest in protecting the integrity of the patent system. More concretely, the decision makes infringement litigation more risky for patentees with reason to believe their patents are vulnerable. Cardinal Chemical, however, does very little to enhance the effectiveness of present remedies for fraudulently obtained patents.

C. THE LICENSEES' DIFFENSE OF INVALIDITY

Traditionally, licensees were estopped to deny the validity of patents used under license. Therefore, even though invalidity might have been established, a patent could still be used to oppress those who, though aware of its questionable character, entered into license agreements to avoid the expense and trouble of mounting an attack against it. It had long been argued, however, that "the public cannot justly refuse to withdraw the appearance of authority, under which such a wrong is perpetrated. . . . "83 "It must be as much the duty of the court in a patent case to protect the public against having to pay tribute to a patentee who is not in any true sense an inventor . . . as to protect the patent rights of . . . a real inventor."84

Consequently, in 1942, in Sola Electric Co. v. Jefferson Electric Co., 85 the Supreme Court held that a licensee would no longer be es-

⁷⁹ We also emphasized the importance to the public atlarge of resolving questions of patent validity[,]..t. the wasteful consequences of relinigating the validity of a patent after it has once been held invalid in a fair trial and ... the danger that the opportunity to relitigate might, as a practical matter, grant monopoly privileges to the holders of invalid patents....[T]he Federal Circuit's practice of routinely vacating judgments of validity after finding noninfringement creates a similar potential for relitigation and imposes ongoing burdens on competitors who are convinced that a patent has been correctly found invalid.

Id. at 100-01 (citations omitted).

⁸⁰ See id. at 102.

⁸¹ See Jefferson Electric Co. v. Sola Electric Co., 125 F.2d 322, 323-24 (7th Cir. 1941) (the estoppel of a licensee to deny the validity of the licensed patent is elemental and a departure from this principle should be addressed to Congress, not the courts).

⁸² See 2 William C. Robinson, Law of Patentises 728, at 478 (Boston, Little, Brown, and Co. 1890).

⁸³ Id.

⁸⁴ Frank Adam Electric Co. .v. Colt Patent Fire Arms Mfg. Co., 148 F.2d 497, 502-03 (8th Cir. 1945) (holding that the district court's conclusion of both validity and infringement were not justified by the evidence).

^{85 317} U.S. 173 (1942). This was an action for unpaid royalties and an injunction restraining further sales except in conformity with a license agreement containing a price-fixing clause. See id. The licensee's counterclaim asserted both the illegality of the price fixing

topped from challenging the license by showing patent invalidity,86 and that a violation of the Sherman Act would deprive a patentee of protection from patent rules of estoppel.⁸⁷ Then, a generation later, *Lear*, *Inc.* v. Adkins88 overruled the Supreme Court's prior holding in Automaticee Radio Mfg. Co. v. Hazeltine Research Inc., 89 that licensee estoppelee should be "the general rule", and pointed out that:ee

> Licensees may often be the only individuals with enough economic incentive to challenge the patentability of an inventor's discovery. If they are muzzled, the public may continually be required to pay tribute to would-be monopolists without need orejustification.90

Both licensees and accused infringers, therefore, are now in a stronger position to challenge the validity of patents being asserted against them under the patent law than they were during the early, "traditional" antitrust era.91 However, since the incentive to engage in patent fraud to

clause as well as its non-liability for royalties. See id. at 173-74. The licensee then showed that the patent was invalid and argued that the license, and its set prices, were unlawful and unenforceable. See id..

- 86 Id. at 177; see also White & Staubitz, The Antitrust Attack on Patent Licensing From Light Bulbs to Lear Jets, 25 Bus. Law 1725, 1727 (1970).
- 87 Sola, 317 U.S. at 177; see also White & Staubitz, supra note 86. The greatest amount of tension between patent law and antitrust law would appear to exist in patent license agreements. See generally Symposium, Patent-Antitrust: Dead or Alive?, 59 ANTIRUST L.J. 657 (1991) (articles on patent-antitrust tension).
 - 88 395 U.S. 653 (1969).
- 89 339 U.S. 827 (1950); see supra note 38 and accompanying text, for the dissent's view of Automatic Radio.
 - 90 Lear, 395 U.S. at 670.
- 91 Public policy now favors invalidating worthless patents. See Richard H. Stern, Antitrust Implications of Lear v. Adkins, 15 ANTIRUST BUIL. 663, 667 (1970) ("The first and most obvious implication of Lear v. Adkins . . . is the proposition that if public policy favors the invalidation of specious patents, then the government should bring suits to declare such patents invalid and thus vindicate that public policy."). Consequently, since Lear v. Adkins, several circuits refused to enforce patent license provisions that permit the licensor to terminate the license after the licensee challenges validity, and placed royalties in escrow during pendency of patent challenges despite contractual obligations to pay the licensor. See, e.g., Precision Shooting Equipment Co. v. Allen, 646 F.2d 313 (7th Cir.), cert. denied, 454 U.S. 9634 (1981); Atlas Chemical Indus., Inc. v. Moraine Products, 509 F.2d 1 (6th Cir. 1974). However, more recently, the Federal Circuit has characterized the reasoning of Lear v. Adkins as "tones that echo from a past era of scepticism over intellectual property principles," and has held that there are still circumstances in which the equities of contractual relationships should deprive one party of the right to challenge validity despite the public policy of encouraging challenges of potentially invalid patents. Diamond Scientific Co. v. Ambico, Inc., 848 F.2d 1220 (Fed. Cir. 1988); Cordis Corp v. Medtronic, Inc., 780 F.2d 991 (Fed. Cir. 1985), cert. denied, 476 U.S. 1115 (1986) (it would not be fair for licensees to be allowed to cease royalty payments while continuing to benefit from the licensing agreement); accord Warner Jenkinson Co. v. Allied Chemical Corp., 567 F.2d 184 (2d Cir. 1977); Nebraska Engineering Corp v. Shivvers, 557 F.2d 1257 (8th Cir. 1977). Potential infringers, after all, should not be "encouraged to enter into bad faith negotiations for a license when their clear intention is simply to challenge the validity of the patent." See Baker & Sayler, supra note 2, at 250-51; see also

facilitate monopoly continues to be high, 2 the search for effective and appropriate antitrust remedies remains urgent regardless of whether defenses or counterclaims of invalidity are sustained. In other words, the fact that the government can move to cancel a fraudulently procured patent,83 or that fraud may support an invalidity defense for accused infringers, may not fully protect the public. Let The Justice Department rarely moves to cancel. So As mentioned earlier, there is always much economic incentive for patentees to conspire with infringers and those who might initiate patent office interferences to conceal invalidity and avoid litigation through oligarchic cross-licensing, thus disadvantaging the rest of the market. Left unchallenged, fraudulently obtained patents can continue to thwart competition. Moreover, even if patent validity were fairly well policed by the government, cancellation and judgments of unenforceability still would not be enough to correct on-going restraints of trade caused by fraudulent patents, or restore free and competitive markets.87 The protection of consumers from the inequity and evil of patent fraud requires strict antitrust enforcement and effective remedies.

ILEEPATENTS AND ANTITRUST ENFORCEMENTEE

It has not always been clear that courts should have jurisdiction to destroy or limit patent rights. In fact, prior to the advent of antitrust

Hemstreet v. Spiegel, Inc., 851 F.2d 348 (Fed. Cir. 1988) (a provision of a settlement order that required a licensee to make payments without regard to any subsequent determination of validity or enforceability of a patent will preclude licensee from terminating payments after patent is adjudged unenforceable in a separate action). Recently, a licensee in the United States was held liable for breach of a patent licensing agreement under a patent declared invalid because it failed to disclose, as required by the agreement, its use of a new process, thus delaying a timely challenge to the invalid patent. See Studiengesellschaft Kohle, M.B.H. v. Shell Oil Co., 112 F.3d 1561 (Fed. Cir. 1997).

- 92 See supra notes 3-11, 38 and accompanying text.
- 93 See supra notes 44-51 and accompanying text.
- 94 See E.I. duPont de Nemours v. Berkley & Co., 620 F.2d 1247, 1274 (8th Cir. 1980) (inequitable conduct short of fraud can be a defense in a patent infringement suit but cannot support an antitrust claim for damages and other injunctive relief beneficial to the public); Hewlett-Packard Co. v. Bausch & Lomb, Inc., 882 F.2d 1556 (Fed. Cir. 1989); FMC Corp. v. Manitowoc Co., Inc., 835 F.2d 1411 (Fed. Cir. 1987); Argus Chemical Corp. v. Fibre Glass-Evercoat Co., Inc., 812 F.2d 1381 (Fed. Cir. 1987); Brunswick Corp. v. Riegel Textile Corp., 752 F.2d 261 (7th Cir. 1984); Becton, Dickinson & Co. v. Sherwood Medical Industries, Inc., 516 F.2d 514, 521 (5th Cir. 1975).
- 95 During the years 1790 to 1960, for example, the government brought only nine suits to cancel patents for fraudulent procurement from the patent office, and most were dismissed because of lack of proof. See S. William Cochran, Historical Review of Fraud in Patent Procurement: The Standards and Procedures for Doing Business Before the Patent Office, 52 J.PAT. OFF. Soc'y 71, 75 (1970).
 - 96 See, e.g., American Cyanamid v. FTC, 363 F.2d 757 (6th Cir. 1966).
- ⁹⁷ Such orders only remove property rights as compared to the broader remedial orders possible in antitrust cases. *See generally* Federal Trade Commission Act, 15 U.S.C. §§41-58 (1994).

litigation around the turn of the century, the government had been denied the right to question a patent's validity when it had attempted to challenge the judgement of patent examiners in *United States v. American Bell Telephone*. 98 The Court held that federal courts could not be used to attack patents collaterally because this would amount to an unauthorized exercise of appellate jurisdiction over decisions of the Patent Office. 99 The antitrust laws, however, "were enacted to prevent competitors from contracting or combining in such a way as to put artificial handicaps in the way of [others] who would thus be deprived of the opportunity to serve the public interest" 100 and to "secur[e] fair opportunity for the play of the contending forces ordinarily engendered by an honest desire for gain." 101

The Clayton Act¹⁰² was intended to strike down a monopoly at its inception,¹⁰³ when the first steps are taken, while the Sherman Act¹⁰⁴ seeks to eliminate a monopoly after it has become more viable.¹⁰⁵ In addition, Section 5 of the Federal Trade Commission Act defines "unfair methods of competition" to include incipient or actual violations of antitrust laws¹⁰⁶ as well as whatever *new* standards for actionable "non-com-

^{98 167} U.S. 224 (1897); see supra note 49 and accompanying text.

⁹⁹ See id. at 269.

¹⁰⁰ United States v. Parker-Rust-Proof Co., 61 F. Supp. 805, 812 (E. D. Mich. 1945) (comparing the patent laws to the anti-trust laws).

¹⁰¹ FTC v. Raladam Co., 283 U.S. 643,6647 (1931) (quoting FTC v. Sinclair Refining Co., 261 U.S. 463, 476 (1923)). "The paramount aim of the act is the protection of the public from the evils likely to result from the destruction of competition or the restriction of it in a substantial degree... & Id. at 647-48; see also California Rice Indus. v. FTC, 102 F.2d 716, 721 (9th Cir. 1939).

¹⁰² Clayton Act, ch. 323, § 3, 38 Stat. 731 (1914) (current version at 15 U.S.C. § 14 (1992)).

¹⁰³ "The intent here . . . is to cope with monopolistic tendencies in their incipiency and well before they have attained such effects as would justify a Sheiman Act proceeding." S. Rep. No. 81-1775, at 4 (1950).

¹⁰⁴ Sherman Act, ch. 647, 26 Stat. 209 (1890) (current version at 15 U.S.C. §§ 1-7 (1992)).

¹⁰⁵ The Sherman Act deals with contracts, agreements and combinations which tend to the prejudice of the public by the undue restriction of competition or the undue obstruction of the due course of trade, and which tend to "restrict the common liberty to engage therein."

The Clayton Act, so far as it deals with the subject, was intended to reach in their incipiency agreements embraced within the sphere of the Sherman Act. FTC v. Raladam Co., 283 U.S. 643, 647 (1930) (citations omitted); see also United States v. Besser Mfg. Co., 96 F. Supp. 304, 308 (E.D. Mich. 1951), aff'd, 343 U.S. 444 (1952).

¹⁰⁶ See, e.g., FTC v. Cement Inst., 333 U.S. 683, 691-93 (1948). "[The] legislative history shows a strong congressional purpose not only to continue enforcement of the Sherman Act by the Department of Justice . . . but also to supplement that enforcement through the administrative process of the new Trade Commission. Id. at 692. A violation of FTCA section 5 is an implicit violation of the antitrust laws. FTC v. Brown Shoe Co., 384 U.S. 316, 322 (1966) ("[T]he Commission has the power under § 5 to arrest trade restraints in their incipiency without proof that they amount to an outright violation of . . a the antitrust laws."). Thus, any actual antitrust violation is certainly sufficient for the FTC to act under § 5. See FTC v.

petitive" activity or conditions might develop. 107 Section (5)(b) of the FTCA¹⁰⁸ provides the Commission with a complete array of essentially equitable remedies similar to those available to federal courts under the Sherman Act, including relief designed to correct non-competitive conditions in an industry or market. 109 Thus, the antitrust laws protect competitors while maintaining the potential for competition. 110

The wrongful subversion of the patent system to acquire control over technology important to an industry, on the other hand, inherently destroys the potential for competition in that industry. More than fifty-five years ago, in the final report of a national temporary executive committee set up to study patents, 111 it was noted that in:

many important segments of our economy the privilege accorded by the patent monopoly has been shame-fully abused It has been used as a device to control whole industries, to suppress competition, to restrict output, to enhance prices, to suppress inventions, and to discourage inventiveness. 112

Therefore, the public interest in freedom from wrongful economic monopoly has long required the occasional limitation of the protections afforded by patent law.¹¹³

Motion Picture Adver. Serv. Co., 344 U.S. 392, 395 (1953) ("[A] device which has sewed up a market so tightly for the benefit of a few falls within the prohibitions of the Sherman Act and is therefore an 'unfair method of competition't within the meaning of \$5....").

107 Federal Trade Commission Act, 15 U.S.C. § 5 (1992).

108 Federal Trade Commission Act, ch. 311, 38 Stat. 717 (1914) (current version at 15 U.S. C. §§ 41-58 (1992)). "The object of the Trade Commission Act was to stop in their incipiency those methods of competition which fall within the meaning of the word 'unfair.' & Raladam, 283 U.S. at 647.

109 Enforcement of the Sherman Act is solely the responsibility of the Antimust Division of the Department of Justice. See 15 U.S.C. § 4 (1992). The FTC is entrusted with enforcing the FTCA. 15 U.S.C. § 41 (1992), and the Department of Justice and the FTC have joint authority to enforce the Clayton Act, 15 U.S.C. §§ 21, 25 (1992). The Court has analogized the power of the FTC to fashion appropriate relief to that of a court of equity to fashion Sherman Act decrees. FTC v. Beech-Nut Co., 257 U.S. 441, 453-54 (1922).

110 The Congressional purpose in enacting the Sherman Act was to insure a competitive business economy. See United States v. South-Eastern Underwriters Asst n,322 U.S. 533, 559 (1944). The creation of the FTC and the enactment of the Clayton Act was a twofold response by Congress to correct the inability of the Sherman Act to handle certain types of anti-competitive practices. See 1 von Kalinowski, supra note 5, § 2.03(3), at 2-57.

- 111 See FINAL REPORT OF THE TNEC, S. Doc. No. 77-35, at 36 (1st Sess. 1941). 00
 112 Id.
- 113 See United Shoe Mach. Corp. v. United States, 258 U.S. 451 (1922).oo
 Undoubtedly the patentee has the right to grant the use of the rights or privileges
 conferred by his patent to others . . . but the right to make regulation in the public
 interest under the police power of the States or in the exertion of the authority of
 Congress over matters within its constitutional power is controlled by general principles of law, and the patent right confers no privilege to make contracts in themselves
 illegal, and certainly not to make those directly violative of valid statutes of the

Fortunately, Congress left certain terms found in the FTCA, such as "unfair method of competition," without precise definition, intending each case to be determined on its own facts.¹¹⁴ The phrase generally applies to practices characterized by deception, bad faith, fraud or oppression, or those which are contrary to public policy because of their dangerous tendency to unduly hinder competition or create monopoly.¹¹⁵ Remedies for such antitrust violations must (1) put an end to the conspiracy, if that itself is the violation; (2) deprive the antitrust defendants of the benefits of their violations; and (3) render impotent the monopoly power which violates the antitrust law.¹¹⁶ Equitable remedies—such as divestiture,¹¹⁷ dissolution,¹¹⁸ or compulsory licensing¹¹⁹—must undo what could have been prevented had the defendants not outdistanced the government in their unlawful plan.¹²⁰ Remedial orders must take into

United States. . . . The patent grant does not limit the right of Congress to enact legislation not interfering with the legitimate rights secured by the patent but prohibiting in the public interest the making of agreements which may lessen competition and build up monopoly.

Id. at 463-64.

- 114 Congress intended the FTC to have broad power to determine what types of commercial conduct constituted unfair or deceptive practices in the future, as new circumstances arise. See 51 Cong. Rec. 12871 (1914); see also Casewell O. Hobbs, III, The Federal Trade Commission and the Federal Trade Commission Act, in ANTITRUST ADVISOR 334, § 5.07 at 345 (Carla Anderson Hills ed., McGraw Hill 3d ed. 1985) ("In analyzing a particular business practice, accordingly, the FTC is not limited to past precedent and may employ a novel legal theory or an innovative mode of analysis to determine whether a practice is unfair under § 5."). The FTC has the authority to forbid continuance of an activity which, while not technically a violation of the Sherman Act, is contrary to the Act's public policy objectives. FTC v. Beech-Nut Co., 257 U.S. 441, 453 (1922) ("What shall constitute unfair methods of competition denounced by the [FICA], is left without specific definition. Congress deemed it better to leave the subject without precise definition, and to have each case determined upon its own facts, owing to the multifarious means by which it is sought to effectuate such schemes."); see also FIC v. Sperry & Hutchinson Co., 405 U.S. 233, 236 (1972); Atlantic Refining Co. v. FTC, 381 U.S. 357, 369 (1965); FTC v. Brown Shoe Co., 384 U.S. 316, 321 (1966); FTC v. Cement Inst., 333 U.S. 683, 694 (1948).
- 115 See FTC v. Cement Inst., 333 U.S. at 690; see also FTC v. Gratz, 253 U.S. 421, 427 (1920) (It is for the courts, not the commission, ultimately to determine as a matter of law what unfair methods of competition include.).
- 116 See Schine Chain Theatres v. United States, 334 U.S. 110, 128-29 (1948) (discussing the functions of divestiture or dissolution).
- 117 Divestiture is an order of a court that a defendant deprive itself of its title to assets, such as patents. Black's Law Dictionary 478 (6th ed. 1994). This remedy is considered particularly appropriate in cases where acquisition of assets or stock violates Section 7 of the Clayton Act. See United States v. E.I. duPont Nemours, 366 U.S. 316, 328-35 (1961); see also United States v. Ford Motor Co., 405 U.S. 562, 573 (1972).
- 118 Dissolution is the annulment of the patent, so that it no longer has any binding force. BLACK'S LAW DICTIONARY 473 (6th ed. 1994).
 - 119 See infra notes 173-78 for a discussion of compulsory licensing.
- 120 See infra note 314 and accompanying text; Schine Chain Theaters v. United States, 334 U.S. 110 (1948). "[A]n injunction against future violations is not adequate to protect the public interest. If all that was done was to forbid a repetition of illegal conduct, those who had unlawfully built their empires could preserve them intact. They could retain the full dividends

account not only past violations but present and future conditions in a particular industry. 121

There are, however, several principles that limit patent antitrust enforcement efforts. First, equitable Sherman Act decrees must be remedial, not penal. [No] conduct or omission is per se punishable [under the FTCA]"; 23 punishment for individual offenses must remain secondary to the purpose to be accomplished through antitrust decrees. 24 Second, even though patentees on occasion may be compelled to sacrifice pecuniary rewards to avoid trampling public policy, there are limits to the sacrifices that can be extracted. For example, even where the simplest and most effective method of destroying a monopoly might be an order of outright dedication of certain assets, narrowly crafted dissolution or divestiture will be preferred because of the ordinarily non-penal objectives of antitrust decrees. 125

Third, although a court may shape any remedy necessary, there must be a reasonable relationship between the remedy and the antitrust violation. The remedial order must be the most effective in curing the effects of illegal conduct and assuring the public freedom from continuation of that conduct; 127 the order, in other words, must go no further than reasonably necessary to correct the evil and preserve the future rights of

of their monopolistic practices and profit from the unlawful restraints of trade which they had inflicted on competitors." Id. at 128.

121 See Schine Chain Theaters, 334 U.S. at 128.

122 "In actions in equity brought by the Justice Department under the remedial provisions of § 4 of the Sherman Act, . . . the Supreme Court has approved or required diversiture for violations of § 7 of the Clayton Act . . . and for violations of §§ 1 and 2 of the Sherman Act" In re Multidistrict Vehicle Air Pollution, 538 F.2d 231, 235 (9th Cir. 1976) (citation omitted). Under such circumstances, therefore, the line between remedy and punishment is not clear.

 123 FTC v. Ruberoid Co., 343 U.S. 470, 483 (1952) ("The commercial discriminations which [the Act] forbids are those only which meet three statutory conditions and survive the test of five statutory provisos.").

124 See United States v. Union Pac. R.R. Co., 226 U.S. 470, 477 (1913) ("So far as is consistent with this purpose a court of equity dealing with such combinations should conserve the property interests involved, but never in such wise as to sacrifice the object and purpose of the statute.").

125 See Schine Theaters v. United States, 334 U.S. 110, 128 (1948); United States v. Crescent Amusement Co., 323 U.S. 173, 189 (1944) ("The Court has quite consistently recognized in this type of Sherman Act case that the government should not be confined to an injunction against further violations. Dissolution of the combination will be ordered where the creation of the combination is itself the violation.").

126 See Atlantic Refining Co. v. FTC, 381 U.S. 357, 377 (1965) ("[The Court] will interfere only where there is no reasonable relation between the remedy and the violation.") (citation omitted); see also American Cyanamid Co. v. FTC, 363 F.2d 757, 771 (6th Cir. 1966) (citing Atlantic Refining, 381 U.S. at 377); Jacob Siegel Co. v. FTC, 327 U.S. 608,613 (1946).

127 American Cyanamid, 363 F.2d at 757.

competitors and the public. The least confiscatory or drastic means must be used. 128 Still,

The [court] is not obliged to assume, contrary to common experience, that a violator of the antitrust laws will relinquish the fruits of his violation more completely than the court requires him to do. And advantages already in hand may be held by methods more subtle and informed, and more difficult to prove, than those which, in the first place, win a market. When the purpose to restrain trade appears from a clear violation of law, it is not necessary that all of the untraveled roads to that end be left open and that only the worn one be closed. The usual ways to the prohibited goal may be blocked against the proven transgressor and the burden put upon him to bring any proper claims for relief to the court's attention.

... [A suit in equity must] effectively pry open to competition a market that has been closed by defendants' illegal restraints. If [a] decree accomplishes less than that, the Government has won a lawsuit and lost a cause. 129

Hence, so long as patent rights are restricted no further than required, are not being unnecessarily infringed or destroyed, and acts of "unfair competition" are not being punished *per se*, patents either misused or fraudulently procured in violation of the antitrust laws may be limited, restricted, or even destroyed. ^{13 ©00}

¹²⁸ See FTC v. Royal Milling Co., 288 US. 212, 217 (1933); see also Jacob Siegel Co., 327 US. at 612 ("[T]he policy of the law to protect [trade names] as assets of a business indicates that their destruction 'should not be ordered if less drastic means will accomplish the same result." (quoting Royal Milling, 288 US. at 217)).

¹²⁹ International Salt Co. v. United States, 332 US. 392, 400 01 (1947).

¹³⁰ But see William B. Miller, Note, Giving the Patent Owner His Due: Recent Developments in the Antitrust/Patent Misuse Interface, 12 Del. J. Corp. L. 135 (1987) (asserting, while discussing the judicial trends in the interpretation of the National Cooperative Research Act of 1984, that a less severe application of antitrust laws would improve innovation). For another, earlier view of the possible effects of overzealous expansion of the patent-antitrust area from the corporate side, see H. Roy Chope, Conflicts Between the Patent and Antitrust Laws, 49 J. Pat. Off. Socty. 819 (1967). See Louis Kaplow, The Patent-Antitrust Intersection: A Reappraisal, 97 Harv. L. Rev. 1815 (1984) (developing and proposing a conceptual solution to the conflict between antitrust law and patent policy which calls into question much of the earlier analyses of these issues).

Ш. PATENT FRAUD AS AN ANTITRUST VIOLATION ee

For some time, in addition to violating principles of patent law, patent misuse¹³¹ and patent office fraud have also facilitated illegal anticompetitive schemes. "[Activities] indulged in for the purpose of seeking to patent something known by the applicant to be [unpatentable] and as a part of a scheme to create an illegal monopoly or restrain trade (can also be) evidence in an action seeking to enforce [the] antimust statutes [by a private party seeking damages],"132

As early as 1948, in United States v. United States Gypsum Co., 133 the Supreme Court held that the government may directly attack patent validity based on fraud upon the Patent Office to support a charge that a defendant violated the Sherman Act by granting licenses under invalid patents.¹³⁴ Since the Gypsum decision, therefore, validity has been open to direct attack by the government either when raised in defense of conduct violative of the Sherman Act135 or when "related" to such conduct. 136 However, for a patent to be held unenforceable due to fraud, 137

¹³¹ See supra note 40.

¹³² Clinton Engines Corp. v. Briggs & Stratton Corp., 175 F. Supp. 390, e406 (E.D. Mich.ee 1959) (emphasis added); see also Brunswick Corp. v. Riegel Textile Corp., 752 F.2d 261, 266 (7th Cir. 1984) (in addition to a showing of fraudulent procurement of a patent, Sherman Act liability requires proof that the patent was used after its issuance in an anticompetitive fashion).

^{133 333} U.S. 364 (1948).

¹³⁴ Id. The government is only precluded from questioning the competency of its agent or repudiating the bargain made by it in the absence of fraud. See generally Ford W. Harris, United States vs. U.S. Gypsum, 26 J. PAT. OFF. Soc'y 48 (1944).

¹³⁵ In a later decision, United States v. United States Gypsum Co., 340 U.S. 76 (1950) ee compulsory licensing was ordered in order to rectify violations of the Sherman Act through the use of patent licensing agreements to restrain trade and fix prices among all competitors, id. at 94.eeThe government only sought licensing at reasonably royalties, rather than royalty-free licensing, because changes in Court personnel may have convinced the government that continuing to argue for free licensing would have been useless. See HARRY TOULMIN, PATENTS AND THE ANTI-TRUST LAWS OF THE UNITED STATES 16 (Supp. 1969).ee

¹³⁶ See Comment, Antitrust & Patents: Government Standing to Challenge Patents in Antitrust Actions Extended, 58 Main. L. Rev. 307, 310 (1973) (discussing United States v. Glaxco Group Ltd., 410 U.S. 52 (1973), which expands Gypsum by holding that the governmentmay attack validity even without it being raised as a defense as long as it is "sufficiently related to an antitrust violation.")

¹³⁷ Fraud or inequitable conduct before the PTO renders the entire patent unenforceable.ee See LaBounty Mfg., Inc. v. United States Int'l Trade Comm'n, 958 F.2d 1066, 1070 (Fed. Cir. 1992). Such a finding requires proof by clear and convincing evidence of (1) material prior art or other information that was not disclosed to the Patent Examiner and (2) an intent on the part of the applicant to mislead the examiner. See Kingsdown Med. Consultants, Ltd. v. Hollister, Inc., 863 F.2d 867, 872 (Fed. Cir. 1988), cert. denied, 490 U.S. 1067 (1989). Materiality may be established "by a showing that a reasonable examiner would consider the withheld prior art important in deciding whether to issue the patent." Merck & Co. v. Danbury Pharmacal, Inc., 873 F.2d 1418, 1421 (Fed. Cir. 1989). Materiality may also be established by showing that the withheld prior art reference refutes, or is inconsistent with, a position the applicant took in opposing an argument of unpatentability relied on by the PTO. See 37 C.F.R. § 1.56 (b)(2). "When weighing whether uncited prior art is more material than that before the examiner, a

or to sustain an antitrust damages claim based on fraudulent procurement, ¹³⁸ the patentee's misrepresentation to the Patent Office must be material. ¹³⁹ In addition, it must be shown that the Patent Office relied on the misrepresentations ¹⁴⁰ and that the applicant made the representations knowingly and willfully. ¹⁴¹ Given those circumstances, attempts to en-

trial court considers similarities and differences between prior art and the claims of the patent. & Halliburton Co. v. Schlumberger Tech. Corp., 925 F.2d 1435, 1441 (Fed. Cir. 1991). "[The] more material the omission, the less culpable the intent required, and vice versa. & *Id.* at 1439; see supra note 51 and accompanying text.

138 There is a distinction between inequitable conduct rendering a patent unenforceable and inequitable conduct that will support an antitrust claim. The omission or withholding of relevant information that the applicant has a duty to disclose, for example, may also constitute fraud violative of the Sherman Act. See Neil A. Smith, Fraud Upon the Patent Office as a Violation of the Sherman Act, 53 J. PAT. OFF, Soc'y 337.657 (1971). Such conduct need not amount to common law fraud in order to be considered fraud upon the PTO within the meaning of 25 U.S.C. § 285. See Gilbrath Int'l Corp. v. Lionel Leisure, Inc., 587 F. Supp. 605,6608 (E.D. Pa. 1983). The required intent to deceive for an antitrust claim based on fraudulent procurement is "Inowingly and willfully misrepresenting facts to the Patent Office." Walker Process Equip. v. Food Mach. and Chem. Corp., 382 U.S. 172, 177 (1965). In order to establish a violation of Section 2 of the Sherman Act based on a patent obtained by fraud, the antitust plaintiff must establish (1) that the defendant engaged in predatory or anticompetitive conduct (obtained a patent by fraud); (2) a specific intent to monopolize (initiating litigation); and (3) a dangerous probability of achieving monopoly power in the relevant market. See Abbott Lab. v. Brennan, 952 F.2d 1346, 1354 (Fed. Cir. 1991), cert. denied, 505 U.S. 1205 (1992) (citing Arthur S. Langenderfer, Inc. v. S.E. Johnson Co., 917 F.2d 1413, 1431 (6th Cir., 1990)), cert. denied 502 U.S. 808 (1991); White & White v. American Hosp. Supply Corp., 723 F.2d 495, 506-07 (6th Cir. 1983) (citing Lorain Journal Co. v. United States, 342 U.S. 143, 153 (1951)). Under Section 5 of the FTCA, "the Federal Trade Commission must establish that a fraudulently obtained patent had an adverse effect on competition. Michael A. Sanzo, Antitrust Law and Patent Misconduct in the Proprietary Drug Industry, 39 VELANOVA L. REV. 1209, 1215 (1994) (citing American Cyanamid Co. v. FTC, 363 F.2d 757, 768 (6thoo Cir. 1966).

139 See supra note 137. It has long been argued, however, that deliberate misrepresentations alone should be enough for non-enforceability, regardless of materiality. See John F. Camey, Misrepresentations Before the Patent Office: Antitrust and Other Legal Effects, 12 B.C. INDUS. & COM. L. REV. 1005, 1021-24 (1971).00

[I]f the issue before the court is the enforceability of a patent, a deliberate misrepresentation should be sufficient to bar enforcement of the patent, regardless of legaloo materiality or actual reliance. If the question is whether there is an adequate predicate for a damage action [under antitrust laws], proof of legal materiality may be considered requisite, but this issue should be decided without any presumption of materiality favoring the patentee. And finally, there should be no requirement for proof of actual reliance by the examiner oo

Id. at 1024.

140 See, e.g., Smith, supra note 138, at 362.

141 See id. at 369. Thus, good faith is a complete defense to charges of fraudulent procurement. See Cataphote Corp. v. DeSoto Chem. Coatings, Inc., 450 F.2d 769, 772 (9th Cir. 1971), cert. denied, 408 U.S. 929 (1972); Avco Corp. v. PPG Indus., Inc., 867 F. Supp. 84, 94 (D. Mass. 1994) (patent applicant's failure to disclose comparison tests with closest prior art was not inequitable conduct absent intent to mislead); Elkhart Brass Mfg. Co., Inc. v. Task Force Tips, Inc., 867 F. Supp. 782 (N.D. Ind. 1994) (fact questions as to whether patentee intentionally withheld material prior art from the PTO precluded summary judgment on alleged infringers' claim that patentee engaged in inequitable conduct).

force fraudulently obtained patents can violate the antitrust laws. 142 Moreover, by 1960 commentators were suggesting that the FTC should be able to control the use of fraudulent patents 143 as part of its remedial power because the actual or potential economic evil caused by fraudulent procurement makes it a serious misuse of the patent system. 144 It was still not clear, however, whether conspiracy to fraudulently *procure* rather than *enforce* a patent was itself an antitrust violation.

In United States v. Singer Manufacturing Co., 145 the Court held that the Sherman Act was violated by an agreement to terminate an interference proceeding in order to facilitate the issuance of a questionable patent to Singer in return for Singer's promise to cross-license the other parties to the agreement. 146 In a concurring opinion, Justice White suggested alternatively that a decision might be possible on the ground that fraudulent termination of Patent Office proceedings was itself a conspiracy to restrain trade, an issue expressly reserved by the majority. 147 Since a patent is granted in consideration for the disclosure of novel ideas of benefit to the public, the suppression of prior art to obtain a patent which would not otherwise be issued is, he argued, a failure to

¹⁴² See infra note 159.

¹⁴³ See Cullen & Vickers, supra note 14, at 117-19 (discussing the FTCA § 5 and the FTC). "Section 5 uses broad language in order to allow flexibility and not to limit narrowly its applicability. This attempt to protect the public by controlling unfair and deceptive practices contains no express prohibition which would prevent the FTC from acting in a situation such as that presented" Id. at 118 (citation omitted).

¹⁴⁴ See id. at 130-34.

^{145 374} U.S. 174 (1963).

¹⁴⁶ The violative agreement was intended to give maximum protection from Japanese competition to all conspirators. See id. at 178-80. The reason for the agreement was to "'obtain protection against the Japanese machines which might be made....'t' Id. at 180 (quoting the trial court). This collusive settlement was held to be improper and a violation of Section 1 of the Sherman Act without any showing of the relevant market. See id. at 199-200. An antitrust violation may occur where patent litigation is settled in bad faith as part of a scheme to restrain trade. See Duplan Corp. v. Deering Milliken, Inc., 540 F.2d 1215 (4th Cir. 1976).

¹⁴⁷ Singer, 374 U.S. at 197 (White, J., concurring). Regardless of whether, fraudulent procurement of patents violates the Sherman Act, it is clearly a violation of Section 5 of the FTCA. See FIC v. R. F. Keppel & Bro., Inc., 291 U.S. 304, 310 (1934) ("It would not have been a difficult feat of draftsmanship to have restricted the operation of the Trade Commission Act to those methods of competition in interstate commerce which are forbidden at common law or which are likely to grow into violations of the Sherman Act, if that had been the purpose of the legislation."); FTC v. Beech-Nut Packing Co., 257 U.S. 441, 453 (1922) ("The Sherman Act is not involved here except in so far as it shows a declaration of public policy to be considered in determining what are unfair methods of competition, which the Federal Trade Commission is empowered to condemn and suppress."). Thus, even if Justice White's views were not accepted, FTCA Section 5, with its broader scope, probably proscribed such conduct even prior to Singer. See In re The Grand Union Co., 57 F.T.C. 382 (1960), aff'd, 300 F.2d 92 (2d Cir. 1962) ("Congress deliberately left the standard of 'unfair methods of competition' broad, general and flexible in order to make it applicable not only to practices which were considered illegal at common law, but to practices and methods of competition yet to be devised by aggressive and vigorous entrepreneurs.").

give the public its quid pro quo. 248 There is, in other words, a public interest in the patent system which parties cannot subordinate to their private ends. In Singer, "the public [had] been imposed upon and the patent clause subverted."149

In Singer, however, no patent had been directly attacked as invalid. 150 Consequently, on remand, the lower court found that the unlawful conspiracy was the mutually advantageous patent cross-licensing agreement and not the fraud in the Patent Office.¹⁵¹ Moreover, the narrow remedy deemed adequate to dispel the evil effects of that wrongful conduct, as well as to restore competition, was licensing to all on a reasonable royalty basis.152 More extreme measures such as royalty-free licensing or non-enforcement of patents were considered unnecessary. 153

The government, of course, argued that any licensing would only reward the defendant by permitting it to continue an illegal monopoly, that the evil lay in the patent enforcement itself, and that unlike ordinary restrictive licensing violations where compulsory reasonable royalty licensing is usually sufficient, only royalty-free licensing would be proper under these facts. 154 The Court conceded the government's argument but cited (1) the Supreme Court's failure to approve royalty-free licensing in any prior contested case, (2) the principal of Hartford-Empire—that since validity was not attacked, restraining license enforcement would be an unreasonable interference with a valid property right, and (3) the Supreme Court's prior equation of royalty-free licensing with forfeiture. 155 The appropriate remedy in cases where patent validity was not attacked, the Court reiterated, was only that which was necessary to dispel the evil effect of the wrongful conduct and restore competition. 156

¹⁴⁸ Singer, 374 U.S. at 199-200 ("When there is no novelty and the public parts with the monopoly grant for no return, the public has been imposed upon and the patent clause subverted.") (citations omitted).

¹⁴⁹ Id. "[T]o prevent prior art from coming to or being drawn to the [Patent] Office's attention is an inequitable imposition on the Office and on the public." Id. at 200 (citations omitted).

¹⁵⁰ Id. at 189.

¹⁵¹ See United States v. Singer Mfg. Co., 231 F. Supp. 240,t244 (S.D.N.Y. 1964).

¹⁵² See id.

¹⁵³ See id. The government demanded royalty-free licensing. This case, it contended, was distinguishable from precedent that would disallow such a remedy. Yet it was still not apparent to the court that the violation in Singer was more "serious" than in earlier cases so as to warrant the more severe remedy of royalty-free licensing. See id. at 243.

¹⁵⁴ See id. ("[T]he Government argues that since the offense established was the acquisition and pooling of patents in order to assert them against competitors, the only effective means of freeing these competitors from Singer's unlawful exclusion is to deprive Singer of the benefits it derives from the patents.").

¹⁵⁵ See id. at 243-44.

¹⁵⁶ See id. at 244.00

Two years later, however, patent validity was attacked directly in Walker Process Equipment, Inc. v. Food Machinery & Chemical Corp., 157 a patent infringement suit. The defendant counter-claimed that the plaintiff had obtained and maintained the patent fraudulently and in bad faith, knowing it to be without basis. 158 The Supreme Court ruled that the enforcement of a patent procured by fraud may violate the Sherman Act, 159 and that, "[i]n such event, [the] treble damage provisions of

159 The Court, however, refused to allow a claim of patent fraud as a per se illegalityo under Section 2 of the Sherman Act because it was "reluctant to extend [that area of the law] on the bare pleadings and absent examination of market effect and economic consequences.'ò Walker Process, 382 U.S. at 178. Litigation or threats of litigation by patentees, on the other hand, if made in bad faith or for the purpose of harassing would-be competitors, have long been held to constitute antitrust violations. See, e.g., American Potato Dryers, Inc. v. Peters, 184 F.2d 165 (4th Cir. 1950), cert. denied, 340 U.S. 930 (1951). The antitrust laws are violated, therefore, when patentees attempt to enforce patents known to be invalid. See, e.g., Handgards, Inc. v. Ethicon, Inc., 743 F.2d 1282 (9th Cir. 1984), cert. denied, 469 U.S. 1190 (1985); Conceptual Eng'g Assocs., Inc. v. Aelectronic Bonding, Inc., 714 F. Supp. 1262, 1266-67 (D.R.I. 1989) (suits for patent infringement must be brought in good faith). See also Brunswick Corp. v. Riegel Textile Corp., 752 F.2d 261, 265 (7th Cir. 1984), cert denied, 472 U.S. 1018 (1985) (abusive prosecution of patent infringement suits can violate the antitrust laws even if patents are not obtained by fraud); Kellog Co. v. National Biscuit Co., 71 F.2d 662, 666 (2d Cir. 1934). However, even if the "sole purpose [is] to destroy . . . competit[ion], b plaintiffs are protected from antitrust liability unless the threatened litigation is a sham. Eastern R.R. Presidents Conference v. Noerr Motor Freight, Inc., 365 U.S. 128, 138-39 (1961); see also United Mine Workers v. Pennington, 381 U.S. 657 (1965); Handgards, Inc. v. Ethicon, Inc., 601 F.2d 986 (9th Cir. 1979), cert. denied, 444 U.S. 1025 (1980) (infringement suits are presumed to be in good faith because reasonable protection must be afforded to "the honest patentee who [sues] to protect his legal monopoly.ö). For the "sham exception" to apply so that the bringing of a lawsuit can form the basis of an antitrust claim, the alleged infringer has to establish two distinct elements, one objective and one subjective. See Professional Real Estate Developers, Inc. v. Columbia Pictures Indus., Inc., 508 U.S. 49 (1993). In those instances where antitrust liability on counterclaims to infringement suits have been found under Walker Process, however, the patentee's conduct has been so egregious as to leave no doubt that the infringement suit was objectively baseless. See, e.g., Arcade, Inc. v. Minnesota Mining & Mfg. Co., No. CIV-1-88-141, 1991 WL 429344 (E.D. Tenn., Jun. 7, 1991); Conceptual Eng'g Assocs., Inc. v. Aelectronic Bonding, Inc., 714 F. Supp. 1262 (D.R.I. 1989). "[Since] its creation, [therefore,] the Walker Process antitrust claim has always seemed to exist in a sort of patent-antitrust eddy of its own outside of the mainstream of the Noerr line of cases.' James B. Kobac, Jr., Professional Real Estate Investors and the Future of Patent-Antitrust Litigation: Walker Process and Handgards Meet Noerr-Pennington, 63 ANTIRUST L.J. 185, 193 (1994), oo

^{157 382} U.S. 172 (1965).

¹⁵⁸ See id. at 174. After the complaint was dismissed, the defendant in Walker Process amended its counterclaim stating that the plaintiff "illegally monopolized interstate and foreign commerce by fraudulently and in bad faith obtaining and maintaining...its patent... well knowing that it had no basis for... a patent." Id. A plaintiff's failure to plead a fraudulent patent procurement antitrust claim as a compulsory counterclaim in an earlier infringement action brought by a defendant may be a subsequent bar to that claim under FRCP 13 (a). See USM Corp. v. SPS Tech., Inc., 102 F.R.D. 167 (N.D. Ill. 1984) (patent and antitrust claims, although grounded in different legal theories, were essentially identical). But see Tank Insulation Int'l, Inc. v. Insultherm, Inc., 104 F.3d 83 (5th Cir. 1997) (antitrust suit brought in response to prior patent infringement suit by plaintiff who was defendant in patent suit is not barred by reason of plaintiff's failure to assert antitrust claim as compulsory counterclaim in infringement suit); Hydranautics v. Filmtec Corp., 70 F.3d 533 (9th Cir. 1995).

§e4 of the Clayton Act would be available to an injured party."¹⁶⁰ Aee direct, private claim of patent fraud as part of an antitrust violation itselfee rather than as an equitable defense was no longer barred. The rule thatee only the United States could sue to cancel a patent was held to be irrelevant since the fraud claim was being made under antitrust law, not patentee law, and did not seek annulment, but only damages.¹⁶¹

In his concurrence, Justice Harlan emphasized Walker Process dicta indicating that proof of knowing, willful misrepresentation before the Patent Office¹⁶² would be sufficient to strip a patent of its exemption from the antitrust laws.¹⁶³ He argued that the Walker Process decision was "aimed . . . at achieving a suitable accommodation in this area between the differing policies of the patent and antitrust laws,"¹⁶⁴ and concluded that, with respect to patents procured by deliberate fraud, "antitrust remedies should be allowed room for full play."¹⁶⁵ Walker Process, therefore, set the groundwork for more extreme economic

See, e.g., Liberty Lake Investments, Inc. v. Magnuson, 12 F.3d 155, 159 (9th Cir. 1993), cert. denied, 513 U.S. 818 (1994) ("[i]n a case involving a fraudulently-obtained patent, that which immunizes the predatory behavior (the patent) is, in effect, a nullity because of the underlying fraud."); Nobelpharma AB v. Implant Innovations, Inc., 930 F. Supp. 1241, 1253 (N.D. Ill. 1996) (holding that PRE's two part sham test is inapplicable where there was knowing fraud or intentional misrepresentations).

160 Walker Process, 382 U.S. at 174.

- 161 See id. at 175-76. "The gist of Walker's claim is that since Food Machinery obtained its patent by fraud it cannot enjoy the limited exception to the prohibitions of Section 2 of the Sherman Act, but must answer under that section and Section 4 of the Clayton Act in treble damages to those injured by any monopolistic action taken under the fraudulent patent claim." Id. at 176. "[P]atent owners may [now] incur antitrust liability for enforcement of a patent known to be obtained through fraud, or known to be invalid, where licenses or a patent compels the purchase of unpatented goods, or where there is an overall scheme to use the patent to violate the antitrust laws." Harmon, supra note 5, § 11.3, at 457 (citing Atari Games Corp. v. Nintendo of Am. Inc., 897 F.2d 1572 (Fed. Cir. 1990)). A fraudulently procured patent may serve as the basis of a violation of Section 2 of the Sherman Act or Section 5 of the FTC Act. See Litton Indus. Prods., Inc. v. Solid State Sys. Corp., 755 F.2d 158 (Fed. Cir. 1985); American Hoist & Derrick Co. v. Sowa & Sons, Inc., 725 F.2d 1350 (Fed. Cir. 1984); see also Prelin Industries, Inc. v. G & G Crafts, Inc., 357 F. Supp. 52 (W.D. Okla. 1972) (bad faith efforts to enforce a fraudulently obtained patent through harassing infringement suits will violate the antitrust laws).
- 162 See Cataphote Corp. v. De Soto Chem. Coatings, Inc., 450 F.2d 769, 772 (9th Cir. 1971), cert. denied, 408 U.S. 929 (1972) ("'[k]nowing and willful fraud', as the term is used in Walker, can mean no less than clear, convincing proof of intentional fraud involving affirmative dishonesty, 'a deliberately planned and carefully executed scheme to defraud . . . the Patent Office."").
- ¹⁶³ Walker Process, 382 U.S. at 177; see, e.g., United States v. Ciba-Geigy Corp., 508 F. Supp. 1157 (D.N.J. 1979) (patent fraud as the basis for a government antitrust action).
 - 164 Walker Process, 382 U.S. at 179.
- 165 Id. at 180 (Harlan, J., concurring). In Corning Glass Works v. Anchor Hocking Glass Corp., 253 F. Supp. 461 (D. Del. 1966), cert. denied, 389 U.S. 826 (1967), Walker Process was construed to "necessarily [assume] that the intentional misrepresentations were a material factor in obtaining the patent." Id. at 470. "If one were entitled to a patent under the legal tests of patentability, there is no illegal monopoly resulting from the statements on which to base an antitrust action." Id.

repercussions from direct or counter-claims of fraudulent procurement than had previously been the case.

One remaining question, though, was what "allowing antitrust remedies room for full play" might mean in the patent context. Private parties, of course, have no standing to sue to cancel a patent; but could an antitrust attack on patent validity result, under certain circumstances, in non-enforcement of royalty or other patent rights consistent with the traditional protections of patent and constitutional law?

IV.eeALLOWING "FULL PLAY" FOR ANTITRUST REMEDIES:ee COMPULSORY REASONABLE ROYALTY AND ROYALTY-FREE PATENT LICENSING AS REMEDIES FOR PATENT FRAUD VIOLATIONS

In 1966, the United States Court of Appeals for the Sixth Circuit reviewed a unique order of the FTC in *American Cyanamid v. Federal Trade Commission*. ¹⁶⁶ In that case, the FTC had found that a leading drug manufacturing company had

made deliberately false and misleading statements to, and withheld material information from, the Patent Office in securing [a] patent; that this conduct amounted to 'unclean hands,' 'inequitableness' and 'bad faith' visavis the Patent Office; that [said drug company] asserted monopoly rights under its patent in order to prevent competition in the . . . market [for tetracycline, a "wonder drug"]; and that the effects of [such] acts and conduct . . . have been to restrain competition, to foreclose access to substantial markets to competitors and potential competitors, and to create a monopoly . . . in violation of Section 5 of the Federal Trade Commission Act. 167

The FTC's final order, however, recognized the validity of the patents in question and compelled only reasonable royalty licensing. 168 The FTC

^{166 363} F.2d 757 (6th Cir. 1966). *Cyanamid* decided that conspiracy to fraudulently procure patents, if it lead to and was part of a scheme that violated the Sherman Act, was an antitrust violation and could be affirmatively attacked as such if done as part of a general attack on an anti-competitive scheme. *See* Camey, *supra* note 139.

¹⁶⁷ American Cyanamid, 363 F.2d at 762. The Commission also concluded that the defendants had conspired to fix and maintain the price of this fraudulently patented drug. See id. at 768

¹⁶⁸ See American Cyanamid et al., 63 F.T.C. 1747 (1963); see also Charles Pfizer & Co. v. FTC, 401 F.2d 574, 586 (6th Cir. 1968) (subsequent decision in case of American Cyanamidoo v. FTC, 363 F.2d 757 (6th Cir. 1966) (affirming ruling that Section 5 of the FTCA had beenoo violated, providing extracts from commission's final decision and, among other remedies, or-

decision largely was based on the fact that there was a *subsequent use* of the patent to exclude competition ¹⁶⁹ and not because of a fraudulent procurement *per se*. Citing *Walker Process* and *Singer*, the Sixth Circuit agreed that the FTC "[did have] jurisdiction to determine that the conduct of the parties before the Patent Office resulting in the issuance of the patent and the subsequent use of the fruits of that conduct may, *in total*, be found to [have] constitute[d] violation of Section 5 of the Act."¹⁷⁰ On remand, the FTC examiner ruled that not only was there misconduct before the Patent Office but that, due to such misconduct, Patent Office officials issued "a patent . . . that otherwise never would have been issued."¹⁷¹

The decision in *American Cyanamid* raised several questions. For example, what *can* be done about private competitors and government agencies who are inadequately staffed and funded, and are unable to police inequitable or fraudulent conduct in cases such as *American Cyanamid*? Antitrust law in the modern era has been extraordinarily solicitous of patent rights,¹⁷² but what could more urgently call for remedies tantamount to cancellation than illegal restraints of trade (and the concomitant unreasonably high prices for vital consumer products) intentionally imposed on the basis of patents *known* to be invalid? Should federal courts be permitted to order cancellation if necessary, even in private antitrust litigation? On the other hand, might there be situations where antitrust enforcement can reasonably require that invalid patents not be divested of all value, even for a patentee who knowingly obtained it through fraud?

Compulsory reasonable royalty licensing and even more severe orders such as divestiture or dedication of patents have long been deemed

dering Pfizer to license its patent on tetracycline to any domestic applicant at a royalty of not more than 2.5%).

¹⁶⁹ The Sixth Circuit, in sustaining the Order, did not hold that there was jurisdiction to invalidate or destroy a patent, nor did it give sanction to any order of compulsory licensing without payment of reasonable royalties. *American Cyanamid*, 363 F.2d at 772. The *Cyanamid* court only noted that, with regard to an appropriate remedy, the Commission was not dealing with a patent on an ordinary item of commerce, but with "patents . . . of vital importance . . . and of tremendous impact upon the public health," and thus the Commission had jurisdiction to require compulsory licensing on a reasonable royalty basis. *Id.*

¹⁷⁰ *Id.* Since the Commission's decision as to improper conduct was not supported by substantial evidence, the entire proceeding was remanded for a *de novo* hearing on all issues, including misrepresentation. *See* Chas. Pfizer & Co., [1965-1967 Transfer Binder] Trade Reg. Rep. (CCH) ¶ 17,773 (Dec. 3, 1966).

¹⁷¹ American Cyanamid, 363 F.2d at 772; see also Note, FTC Held to Have Power to Render Inequitably Procured Patent Unenforceable, 38 N.Y.U. L. Rev. 1191 (1963).

¹⁷² See Gerald Sobel, The Antitrust Interface with Patents and Innovation: Acquisition of Patents, Improvement Patents and Grant-backs, Non-Use, Fraud on the Patent Office, Development of New Products and Joint Research, 53 ANTITRUST L.J. 681, 711 (1984) ("The antitrust laws have shown [and continue to show] a special solicitude for patents and innovations in many forms.").

appropriate antitrust remedies.¹⁷³ Fifth Amendment limitations are largely irrelevant to deprivations of property that might necessarily ensue from enforcement of the Sherman Act.¹⁷⁴ Where a proclivity for unlawful activity has manifested, antitrust remedies, which must prevent and restrain violations, conduct or acts,¹⁷⁵ may "depriv[e] those who have engaged in [violations] of the weapons which they used in making [the violations] effective" unless to do so would be purely arbitrary.¹⁷⁶ Thus, in patent cases where business practices have created an illegal monop-

173 "TThe [equitable] powers of the courts in civil proceedings..o. are practically unlimited." A.D. Neale & D.G. Goyder, The Antitrust Laws of the United States of AMERICA 394 (3d ed. 1980). Courts will strive to find practical, suitable remedies, especially where "arrangements in the industry systematically discriminated in favour [sic] of the powerful .o. and against the small man." Id. at 396. Thus "[t]he compulsory licensing of patents for reasonable royalties has now become to all intents and purposes a routine measure of relief in cases of monopolization where the company concerned has built up its position largely through patent holdings." Id. at 409. With regard to the use of compulsory reasonable royalty or royalty-free licensing, see supra note 13 and accompanying text. Concerning dedication, see infra notes 219,1230. Divestitures and dissolution are often also appropriate antitrust remedies. See, e.g., United States v. Paramount Pictures, Inc., 334 U.S. 131 (1948) (where Justice Douglas ruled that, in light of the practical difficulties in administering a compulsory licensing decree issued below in a complex case, the better relief would be outright divestiture of substantial assets). But see United States v. United Shoe Mach, Corp., 110 F. Supp. 295 (D. Mass, 1953), aff'd, 347 U.S. 521 (1954) (Judge Wyzanski discussing the reasons for and against divestitures in a practical context). Divestiture, however, is a more likely remedy in cases where the antitrust violation is a completed merger which has been held invalid under Section 1 of the Sherman Act or Section 7 of the Clayton Act. See, e.g., Ford Motor Co. v. United States, 405 U.S. 562 (1972) (upholding divestiture under Section 7); see also United States v. Aluminum Co. of Am., 148 F. 2d 416 (2d Cir. 1945) (pointing out that the standards for assessing remedies are different from those by which illegality is determined, that economic circumstances may make dissolution counterproductive, and that eliminating otherwise lawful reciprocal patent licensing would be more effective).

174 See United States v. Joint Traffic Ass'n, 171 U.S. 505, 571 (1898). "Among these limitations and guarantees [are] those which provide that no person shall be deprived of life, liberty, or property without due process of law, and that private property shall not be taken for public use without just compensation. The latter limitation is . . . plainly irrelevant." Id.; see also Philip Marcus, Patents, Antitrust Law and Antitrust Judgments through Hartford-Empire, 34 Geo. L.J. 1, 43 (1945).

Under the present state of the law it may be said that although patents are not subject to forfeiture for violation of the Sherman Act, the patentee does not enjoy an immunity from partial or entire curtailment of normal patent rights where such curtailment is necessary to remedy an economic condition established by violation of the Sherman Act.

Id. at 45.

¹⁷⁵ See United States v. Union Pac. Ry. Co., 226 U.S. 470, 477 (1913) ("[N]o form of dissolution [can] be permitted that in substance or effect amounts to restoring the combination which it was the purpose of the decree to terminate.").

176 Chain Inst., Inc. v. FTC, 246 F.2d 231, 235 (8th Cir. 1957); see United States v. Crescent Amusement Co., 323 U.S. 173, 185-91 (1944) (analyzing the complicated issues present in a Sherman Act decree). Remedial decrees should operate as "effective deterrent[s] to a repetition of the unlawful conduct and yet not stand as a barrier to healthy growth on a competitive basis." *Id.* at 186.

oly and the remedy is deemed essential, 177 compulsory licensing or divestiture of patents are appropriate forms of relief.

Compulsory licensing is usually ordered as an antitrust remedy where patentees have engaged in licensing practices not contemplated by the patent laws.¹⁷⁸ In the early 1940s, for example, an otherwise valid patent was unlawfully extended by a conspiracy to fix the prices of adjunctive devices not within the claims of the patent.¹⁷⁹ The government showed an illegal restraint of trade over an infant industry and contended that the only effective way to dissolve the effects of the monopoly would be to compel royalty-free, unrestricted licenses. Otherwise, the government argued, economic abuse would continue through stealth and concealment.¹⁸⁰ The court refused the suggested remedy, however, because:

at this time, [the court is] not certain the patents in suit should, as a practical matter, be virtually canceled by . . . royalty-free licensing. [The court had] no doubt that there may be judicial death-sentence of a patent in a proper case, but [the court] must be convinced that *this* is the case. 181

Nevertheless, a year later, the Supreme Court was more receptive to the demands for royalty-free licensing. In that case, the development of glass-making machinery had been discouraged in order to maintain the prices of a defendant's products. Competition in the manufacture, sale and licensing of such machinery had been suppressed. Furthermore, a system of restricted licensing among the leaders of the industry had been employed in violation of the Sherman Act and the Clayton Act. Theee

¹⁷⁷ See Carlisle M. Moore, Note, A Study of Compulsory Licensing and Dedication of Patents as Relief Measures in Antitrust Cases, 24 Geo. Wash. L. Rev. 223,t233 (1955). Even absent abusive practices in the use of patents, patentees may still be required to license patents on a reasonable royalty basis to reduce the monopoly power achieved as a result of business practices. See id.; see also United States v. United Shoe Mach. Corp., 110 F. Supp. 295 (D. Mass. 1953), aff'd, 347 U.S. 521 (1954).

¹⁷⁸ See, e.g., William D. Kilgore, Antitrust Judgments and Their Enforcement, 4 A.B.A. Antitrust Sec. Rep. 102, 138 (1954).

¹⁷⁹ United States v. Vehicular Parking Ltd., 54 F. Supp. 828 (D. Del. 1944). This behavior, of course, would also violate the patent laws if the patentee sought to enforce the fixed prices. *See supra* notes 39, 40.

¹⁸⁰ See id. at 841.

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¹⁸² See Hartford-Empire Co. v. United States, 323 U.S. 386 (1945).

¹⁸³ See id. at 392.

¹⁸⁴ See id.

¹⁸⁵ In 1938, Hartford-Empire had acquired more than 600 patents and merged these by cross-licensing agreements with more than 240 patents of co-conspirators into a pool which effectively controlled the industry to the point where "94% of the glass containers manufactured in this country on feeders and formers were made on machinery licensed under the pooled patents." *Id.* at 400.

defendant itself produced nothing, being mainly a patent holding and licensing company which controlled and furthered technology and patent development in the industry.¹⁸⁶ The government sought dissolution of the holding company, but the court was convinced that a continuation of certain of the defendant's activities would be an advantage to the industry, so it rejected dissolution as a remedy.¹⁸⁷ The decree ordered royalty-free licensing instead,¹⁸⁸ and was appealed to the United States Supreme Court.

In Hartford-Empire Co. v. United States, ¹⁸⁹ the Supreme Court held that since the decree was not directed at any combination, agreement or conspiracy, royalty-free licensing went beyond what was required (elimination of illegal combinations and the prevention of future violations) by unreasonably confiscating considerable portions of defendant's property. ¹⁹⁰ "It is to be borne in mind that the Government has not, in this litigation, attacked the validity of any patent or the priority ascribed by the Patent Office, nor . . . the standard royalties heretofore exacted "¹⁹¹ The Supreme Court found that the decree was confiscatory and non-essential. ¹⁹² The Court struck ¹⁹³ the provisions that would have prevented infringement suits until violations were dissipated (under the

¹⁸⁶ See Joseph Borkin, Patent Abuses, Compulsion to License and Recent Decisions, 43 Colum. L. Rev. 720, 729-30 (1943) [hereinafter Borkin I]; see also United States v. Hartford-Empire Co., 46 F. Supp. 541, 546 (N.D. Ohio 1942), aff'd in part, rev'd in part sub nom. Hartford-Empire Co. v. United States, 323 U.S. 386 (1945).

¹⁸⁷ See Hartford-Empire, 46 F. Supp. at 620.

¹⁸⁸ See Hartford-Empire, 323 U.S. at 413; see also Hartford-Empire, 46 F. Supp. at 621 ("[T]he defendants shall be required to license anyone, royalty-free, in the manufacture of machines embodying these patent rights.").

^{189 323} U.S. 386 (1945).

¹⁹⁰ Id. at 413.

¹⁹¹ Id. at 414.

¹⁹² See id.

¹⁹³ See Hartford-Empire, 323 U.S. at 419. Since the Hartford-Empire majority was apparently unwilling to discredit the ratio decidendi of Morton Salt, there would seem to have been no justification for denying similar relief in Hartford-Empire. One possible distinction, however, is that under Morton Salt the patentee is precluded from seeking to enjoin infringement but can still attempt to collect damages (royalties) in a civil action and, therefore, the result would not be total forfeiture. See Note, Hartford-Empire v. United States: Integration of the Anti-Trust and Patent Laws, 45 Colum. L. Rev. 601, 618-19 (1945) [hereinafter Hartford-Empire Note]. However, since equitable defenses would continue to be available, even the damage remedy might be denied, and this argument would be nullified. See id. Another way of harmonizing Morton Salt and Hartford-Empire is to limit Morton Salt to cases in which the issue of reasonable royalties are not raised, thereby at least denying rewards to the patentee in infringement suits. It would seem to follow from the refusal to grant royalty-free licenses in Hartford-Empire that an infringer in the future could successfully defend by offering to pay reasonable royalties. Id.

Morton Salt doctrine). 194 In addition, the Court set royalties at reasonable rates. 19500

Controversy surrounded this case due, in large measure, to the well written dissents. 196 Justice Black argued that the lower court actually had fashioned the most effective remedial decree, one "admirably suited to neutralize the consequences of such violations, to guard against repetition of similar illegal activities, and dissipate the unlawful aggregate of economic power which arose out of, and fed upon, monopolization and restraints." Since the patents were the major weapons in the campaign to subjugate the industry asewell as the fruits of defendant's victory, Justice Black argued, restoration of competition demanded that defendants be deprived of these weapons, and the most effective way to accomplish this was to require royalty-free licensing. 19800

Justice Rutledge's dissent urged closer examination of "the complete picture," which is not only pertinent to liability but also bears upon the character of relief required to uproot the combination's destructive and unlawful effects. The court below is most familiar with the facts, he said, and it must be allowed to judge whether or not a remedy is

The Supreme Court modified [the decree] to include compulsory licensing, but at reasonable royalties, and only with relation to patents on the four major machines and their improvements. Its modifications were based on the theory that the original provision would effect a confiscation of the defendant's property which was not essential to termination of the illegal combination.

^{194 &}quot;Equity may rightly withhold its assistance . . . by declining to entertain a suit for infringement, and should do so at least until it is made to appear that the improper practice has been abandoned and that the consequences of the misuse of the patent have been dissipated." Morton Salt Co. v. G. S. Suppiger Co., 314 U.S. 488,e493 (1942); see supra notes 39, 40 and accompanying text.

¹⁹⁵ See Hartford-Empire Note, supra note 193, at 622-23

Id. The government had argued that royalty-free licensing was necessary to restore competition in the industry, that a continued right to royalties would give defendants an advantage which would discourage creation of a competitive industry. Permitting a charge for entrance into the industry, said the government, could perpetuate the monopoly indefinitely. See Government's Brief on Re-argument at 79, 94, 95, Hartford-Empire v. United States, 323 U.S. 386 (1945) (No. 4426). Newcomers would not enter a heavily controlled industry faced with an imposition of royalties. See Government's Main Brief, Hartford-Empire v. United States, 323 U.S. 386 (1945) (No. 4426). These arguments, as well as the government's additional argument that defendant's wrongful acts in procuring and later abusing the patents made them unenforceable, id., ultimately failed because the economic situation the government described as "evil" was actually shown to be advantageous. See supra notes 186-94 and accompanying text. Reasonable royalties were desired by both actual and potential competitors as a means to further industry-wide progress. See Government's Main Brief, supra.

^{196 &}quot;These dissenting opinions are of importance because the view which they embody tended later to become dominant in the courts." NEALE & GOYDER, *supra* note 173, at 408.

¹⁹⁷ Hartford-Empire, 323 U.S. at 435 (Black, J., dissenting) (citing United States v. Crescent Amusement Co., 323 U.S. 173 (1944)).

¹⁹⁸ See id. at 436-37.

¹⁹⁹ Id. at 440 (Rutledge, J., dissenting).

²⁰⁰ Id.

essential in the context of what is often a complex situation.²⁰¹ There is no "clear, sharp line which can be drawn on the crux of past and future, between punishment and prevention or dissipation .e.e. ."²⁰²

The majority, said Justice Rutledge, also "ignores the momentum inherent in this combination." Royalty-free licensing was *particularlyee* justified here, he suggested, because the violation was gross, had continued for quite some time, and, consequently, it was no longer possible to discern which patents were or were not legally obtained. 204

To permit the continued collection of royalties would be to perpetuate, for the lives of the patents, the illegal consequences of the violations. That the court is bound, in equity, and by statute, not to do. [The court, in] seeking to avoid dissolution, has the duty to apply a remedy equally adequate. It could not do this, if the [patents remained as a] continuing source of revenue to the violators and a burden to the public.²⁰⁵

Justice Rutledge noted that royalty-free licensing does not deprive defendants of the rights of ownership to the same extent as would cancellation, 206 but even if it did, when a patentee overreaches the boundary of his patent, there is sufficient reason to deny the patentee the usual protection of the holder of property; "[t]hat this ordinarily has been done in infringement suits or suits for cancellation does not qualify . . . the policy." 207

In *United States v. National Lead Co.*,²⁰⁸ however, decided just two years later, the Court pointed out that the interest in promoting future industry-wide competition may occasionally outweigh the policy of depriving defendants of the fruits of patent fraud.²⁰⁹ There, an action was brought to enjoin the wrongful use of patents to control the manufacture and use of titanium pigments.²¹⁰ Once again, the validity of the patents was not at issue, so a decree ordering compulsory licensing at reasonable royalties was deemed appropriate: (1) the infant industry was still growing, (2) there were four competitors, only two of whom had conspired,

²⁰¹ See id.

²⁰² Id.

²⁰³ Id. at 442.

²⁰⁴ See id. at 450.

²⁰⁵ *Id.* at 450-51.

²⁰⁶ See id. at 450-51. For additional, similar comparisons with the antitrust remedy of dedication see *supra* note 13.

²⁰⁷ Id. at 452-53; see also supra notes 39-42 and accompanying text.

^{208 332} U.S. 319 (1947).

²⁰⁹ Id. at 367.

²¹⁰ See id. at 325.

and (3) there was a strong threat of foreign competition.²¹¹ Royalty-free licensing was thought to be unnecessary to enforce the Sherman Act because the growing strength of the two royalty-paying firms demonstrated that royalty-free licensing was not essential to economic progress.²¹² The Court indicated, however, that such relief still might be possible where more clearly required than had been proven below.²¹³ "[It] may well be that uniform, reasonable royalties computed on some patents will be found to be but nominal in value,"²¹⁴ or that extreme difficulty in fixing a proper royalty may be a "proper case" [for royalty-free licensing].²¹⁵

Justice Douglas, in his *National Lead* dissent,²¹⁶ argued that, in light of the defendant's impregnable position, stronger measures should have been adopted to allow *new ventures* to compete with established giants because "[e]ach dollar of royalty adds a dollar to the costs of the new competitor and gives the established licensor another dollar with which to fight that competition."²¹⁷ Where licensor and licensee compete, he

Divestiture or dissolution may be ordered in spite of hardship, inconvenience, or loss. Devices or instrumentalities which may be used for legitimate ends may nevertheless be outlawed entirely where they have been employed to build the monopoly or to create the restraint of trade. For the aim of the decree is . . . to undo what has been done, to neutralize power unlawfully acquired, to prevent the defendants from acquiring any of the fruits of the condemned project.

²¹¹ See id. at 338-40. "[W]ithout reaching the question whether royalty-free licensing or perpetual injunction against the enforcement of a patent is permissible as a matter of law in any case, the present [reasonable royalty] decree represents an exercise of sound judicial discretion." Id. at 338.

²¹² See id. at 351.

^{213 &}quot;We do not, in this case, face the issue of the constitutionality of such an order. That issue would arise only in a case where the order would be more necessary and appropriate to the enforcement of the Antitrust Act than here." *Id.* at 349. These comments may have been provoked by the fact that "[it] was widely believed at that time that this remedy could hardly fail to be punitive and even that it ought not to be applied without specific legislative authority." NEALE & GOYDER, *supra* note 173, at 410.

²¹⁴ National Lead, 332 U.S. at 349. "[T]o reduce all royalties automatically to a total of zero, regardless of their nature and regardless of their number, appears, on its face, to be inequitable without special proof to support such a conclusion." *Id.*

²¹⁵ Id. at 349-50. In United States v. American Optical Co., 95 F. Supp. 771 (S.D.N.Y. 1950), after entering a consent judgment canceling certain licenses and ordering compulsory licensing of numerous patents following evidence of the history of royalties in the industry, the court established a reasonable royalty of three cents as opposed to four cents asked by the defendant (although a licensee claimed that "zero" was the reasonable royalty). Id. at 776. Interpreting National Lead, the court said that although "difficulty" in fixing royalties is "extreme" ("fixing a reasonable royalty where an established royalty does not prevail presents many difficulties"), when none are established, "the best estimate . . . under the circumstances is that three cents is a reasonable royalty" Id.

²¹⁶ National Lead, 332 U.S. at 364.

²¹⁷ Id. at 368.

concluded, the royalty-payor will always be at a disadvantage.²¹⁸ Nevertheless, Justice Douglas failed to discuss the question of the constitutionality of decrees ordering royalty-free patent licensing.

V.eeDEDICATION AS COMPARED TO ROYALTY-FREEee LICENSING IN ANTITRUST DECREES ADDRESSINGee PATENT FRAUD

Patent dedication has long been treated as similar to compulsory licensing but with a somewhat more narrow utility.²¹⁹ In *United States v*. General Instrument Corp., 220 for example, the government asked for dedication of patents because the corporate defendants had attempted to exclude potential competition from the manufacture and sale of radio variable condensers by continuing agreements and concerted action.²²¹ A sizable, effective competitor existed, however, notwithstanding the defendants' patent pooling.²²² Thus, simply ending cooperation effectively divided business and patent ownership among sufficiently diverse and competitive firms; compulsory licensing, at reasonable royalties, was enough to free competition and make defendants completely independent of one another.²²³ Notwithstanding defendants' past pattern of conduct, and their relative dominance in the industry, the most effective remedy for the existing lack of competition was to simply deprive defendants of their ability to condition licensing upon reciprocal licensing.²²⁴ Dedication of patents was unnecessary:

> [This was] not a situation where one enormous firm in an industry, overshadowing all competitors, owned a huge bundle of patents with which it maintained its dominance in violation of the antitrust laws and with which, even were it compelled to license at reasonable royalties, it could preserve a competitive edge by virtue of the drag

²¹⁸ Id. (referencing the brief by *National Lead*). Thus, even with compulsory licensing, the goal of assuring future entry for competitors may not be achieved. *See* Kilgore, *supra* note 178, at 139, 141.

²⁰⁹ See Nordhaus, supra note 13, at §104C-1. "[These forms of relief] are not, however, identical in legal effect." Id. "[Dedication] is a very severe equitable remedy of dubious constitutionality [and, when ordinary compulsory licensing is inadequate, alternatives are recommended, such as ordering a defendant] to divest itself, by sale, of all interest in the patents [used] in violation of the antitrust laws [similar] to the ordering of divestiture or dissolution." Id. at §104C-2.

²²⁰ 115 F. Supp. 582 (D.N.J. 1953).

²²¹ Id. at 590.

²²² See id. at 591.

²²³ See id. at 591.

²²⁴ See id. at 593.

such royalties would have on the success of its competitors.²²⁵

However, the facts in *United States v. General Electric Co.*e²²⁶ decided the same year, apparently met the criteria for dedication. General Electric had attempted to maintain control of the lamp industry by extending its basic patents on lamps.²²⁷ Only the prospective free use of patents could check the advantages gained through both patent misuse and antitrust violations.²²⁸ "Where the profit margin [in this industry] is as narrow as it is at the present [time, said the district court, *any* royalties] may prove an important factor in limiting or inhibiting the growth of competition."²²⁹

Decisions like *General Electric*, which describe circumstances appropriate for the dedication of patents, suggest a basis for similar remedies, such as compulsory royalty-free licensing, which also remove, albeit temporarily, the economic rewards of patents.²³⁰ The *General Electric* court ordered dedication in order to remedy existing anti-competitive conditions, but with a view toward the *future* market: "In view of the fact that General Electric achieved its dominant position in the industry and maintained it . . . by its extensive patent control[, dedication of patents] is only a justified dilution of that control made necessary in the interest of free competition in the industry." Dedication was necessary, aside from any question of fraud or invalidity, because the rest of

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225 Id. at 591.
226 115 F. Supp. 835 (D.N.J. 1953).
227 See id. at 844.
228 See id.
229 Id.
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In . . . circumstances such as these it would appear that royalty-free licensing of patents . . . is an essential remedy as a preventive against a continuance of monopoly It would appear no more confiscatory than where compulsory licensing is ordered. In the latter case the owner admittedly is permitted to receive a royalty but he nevertheless loses a monopoly inherent in his ownership of the patent Royalty free licensing and dedication are but an extension of the same principle

Id. Although they are not identical in legal effect, compulsory royalty-free licensing and dedication "are to a great extent similar remedies." Nordhaus, supra note 13, § 104C. See Note, Compulsory Licensing of Patents by the Federal Trade Commission, 59 N.Y.U. L. Rev. 543, 546-48 (1964) [hereinafter Compulsory Licensing Note] (discussing General Electric):

Despite the distinctions between public dedication of patents and royalty-free licensing, the justification for the action in *General Electric* can be applied to a decree for royalty-free licensing. While in a given situation small competitors may not be able to afford to pay royalties, even if set at a reasonable rate, it may still be desirable to permit the patentee to retain the rights to the results of its research. Thus by ordering royalty-free licensing, a court can achieve free competition in a given industry without permanently depriving the patentee of its patent rights.

Id. at 547.

²³¹ General Elec., 115 F. Supp., at 844.

the industry was financially unequipped to defend infringement litigation or contest the validity of General Electric's huge body of patents.²³²

Unfortunately, General Electric fails to explain why dedication rather than the arguably less confiscatory imposition of royalty-free licensing was appropriate for some patents but not for others. That General Electric's competitors ultimately might shoulder royalties would not have proven to be the factor that would have made them uncompetitive;²³³ royalty-free licensing had been ordered on other patents to prevent a continuation of monopoly.²³⁴ Compelling free, unrestricted licensing could have destroyed the monopoly inherent in patent ownership in much the same way as dedication while not removing title, and both forms of relief were equally well within the therapeutic measures to be administered under these facts.²³⁵

Yet, as in *General Electric*, royalty-free licensing is not imposed as often as dedication. This may be because free licensing was originally designed for conditions arising where an industry is totally dominated by a single firm rather than the much more usual situation where competition is still viable.²³⁶ The *General Electric* court, for example, explained that in granting compulsory royalty-free licensing where it did, it was merely rectifying just such a monopoly, one which arose as a result of the defendant's economic violations and *could not otherwise be corrected*.²³⁷ *General Electric* also suggests that dedication is proper where:

²³² See id.

²³³ See General Elec. Co., 115 F. Supp. at 848. In fact, General Electric had liberal royalty policies, and no evidence was adduced indicating that any competitor was actually forced out. But see United States v. General Instrument Corp., 87 F. Supp. 157 (D.N.J. 1949) (wholly innocent acts, such as establishing royalties, are prohibited by the Sherman Act if they result in a monopoly). "'[T]he power to fix and maintain royalties is tantamount to the power to fix prices." Id. at 191 (quoting Standard Oil Co. v. United States, 283 U.S. 163, 174 (1931)).

²³⁴ See General Elec. Co., 115 F. Supp. at 844.

²³⁵ See id. at 844-45. Actually, the court stated that abuse of patents such as this would even justify invalidation of the patents themselves, i.e., a dissolution of all the monopoly originally granted in the patent. Id. at 845. However, unless the government is simultaneously suing for cancellation, it is doubtful that any court of equity would assume the remedial power or jurisdiction to cancel a patent for antitrust violations. The different treatment of patents in General Electric may have reflected the relative seriousness of the violations involving their use or the differing effect upon the industry of a given remedy in relation to the actual licensing practices General Electric had in effect for the various patents. That is, the decision regarding dedication may have been based on the fact that relative abuse of the dedicated patents was of such serious degree as to constructively destroy their validity and justify such drastic treatment. See Moore, supra note 177, at 232.

²³⁶ See Compulsory Licensing Note, supra note 230, at 547-48.

²³⁷ General Elec., 115 F. Supp. at 844; see also H.B. Rubenstein, Comment, Patents - Compulsory Licensing - Dedication to the Public, 27 Temp. L.Q. 504, 511 (1954). "The belief that property and property rights are sacred has persisted from early common law. To many courts, recognizing and strictly interpreting the patent as property, it would be contrary to the American sense of justice to induce an inventor to make a public disclosure of his invention

(a) the essence of the antitrust violation is the *misuse* of defendant's patent; (b) there has been a violation of both Sections 1 and 2 of the Sherman Act; (c) complete elimination of the patent monopoly is the key toee the restoration of competitive conditions; and (d) dedication will been neither detrimental nor unnecessary to the restoration of competition.²³⁸

General Electric, therefore, seems grounded on the rationale that the interest against confiscation of private property will be outweighed by the compelling need to restore and maintain competition in an industry severely burdened by the results of patent misuse.²³⁹ The decision is reconcilable on its facts with National Lead²⁴⁰ and Hartford-Empire.²⁴¹ Viewed together, these cases provide insight into the relationship between antitrust remedies and violations under circumstances where patents are involved.

The decree in *General Electric*, for example, was well justified by the economic structure of the industry. Earning ninety percent of industry profits, General Electric towered above its competitors in size and market control, while narrow profit margins made royalties critical to the competition.²⁴² The corporation was primarily a manufacturer to whom income from patent royalties was not of critical importance.²⁴³ Actually, many of the dedicated patents were unimportant or unused, and General Electric had already suspended the practice of licensing.²⁴⁴ Of critical importance to the court was the fact that General Electric's huge research

and then deprive him of its benefits." *Id.* "[However, in] spite of Congressional silence, and although aware of the peculiar nature of the patent as property, such provisions are deemed imperative to combat the formation and propagation of monopolies." *Id.*

One view insists that the patent owner is to be protected in his property, that any forfeiture of that property is an unconstitutional deprivation of his right, that in order to preserve unequivocal freedom, there could be no circumstances ever justifying such an invasion. On the other hand, it is contended that since the patent monopoly is a privilege granted by the government as an incentive to inventors, this property right is not an inherent right. It is merely a right arising out of that privilege, an abuse of which may justify the government in its termination.

Id. Furthermore, "[if] the Government can obtain cancellation of a patent upon a showing of fraud and if infringement suits may be denied on a lesser showing of unclean hands in the procurement, due process will surely not forbid royalty-free licensing on a similar showing of unclean hands." Note, Improperly Procured Patents: FTC Jurisdiction and Remedial Power, 77 HARV. L. REV. 1505, 1518 (1964) [hereinafter Improperly Procured Note].

²³⁸ See Moore, supra note 177, at 233-34; see also, General Elec., 115 F. Supp. at 844-45.

²³⁹ See Rubenstein, supra note 237, at 511:

²⁴⁰ See supra notes 208-18 and accompanying text.

²⁴¹ See supra notes 177-204 and accompanying text.

²⁴² See United States v. General Elec. Co., 115 F. Supp. 835, 863 (D.N.J. 1953).

²⁴³ See id. at 862.

²⁴⁴ See Note, Patent Dedication as Antitrust Remedy: New Light on Hartford-Empire, 63 YALE L.J. 717, 723 (1954) [hereinafter Patent Dedication Note].

and technological advantage made dedicating the patents (and sharing the "know-how") essential if smaller firms were to catch up.²⁴⁵

In National Lead, however, patents were properly acquired but misused later in a patent pool.²⁴⁶ Thus, the Court avoided the question of the legality of patent dedication in that case by finding that "there [would have been] no illegal aggregation of patents in one firm, upon cancellation of the licenses, as there was in General Electric."²⁴⁷ The two principal producers in National Lead were strong enough to counterbalance each other and were in active competition, while the two smaller firms were healthy and growing in spite of royalty payments.²⁴⁸ Based on the character of the offense, and those conditions in that industry,²⁴⁹ reasonable royalty payments were probably justified.²⁵⁰

In *Hartford-Empire*, on the other hand, the holding company had no substantial source of income *except* patent royalties.²⁵¹ Its ability to finance research and development helpful to smaller producers in its industry would have been greatly impaired by the loss of income resulting from compulsory royalty-free licensing.²⁵² Consequently, even if Hartford's coercive practices in acquiring and utilizing its patent monopoly might have justified royalty-free licensing, such relief would have *hindered* competition. Royalty-free licensing was inappropriate, therefore, not because it exceeded remedial power *per se*, but because it was more

²⁴⁵ See id. at 722.

²⁴⁶ United States v. National Lead Co., 332 U.S. 319, 348 (1947).

²⁴⁷ Patent Dedication Note, supra note 244, at 723.

²⁴⁸ National Lead, 332 U.S. at 347-48.

²⁴⁹ The decision in United States v. Imperial Chem. Indus., 105 F. Supp. 215, 224 (S.D.N.Y. 1952), in reaffirming Morton Salt, reiterated one of the key elements in the ratio decidendi of National Lead: "[P]atent rights do not differ essentially in character from any other rights which the law creates or recognizes." Id. at 224-25. Imperial Chemical held that mere misuse of patents does not require a forfeiture but "only suspends the rights of the patentee to obtain judicial relief so long as misuse continues or its effects have not been dissipated." Id. at 224. Further, that court suggested that, since the validity of no patent was questioned by the government, to provide for royalty-free licenses would be to unnecessarily destroy the total value of the patent. See id. at 223. Free licensing, however, might last only a few years. The patent still remains an asset on the books of account; title still remains; and enforcement may be possible against a later infringer (a court, in the later suit, having declared the patentee to have dissipated the effects of earlier misuse). Therefore, the patent does in fact have remaining "value" for future sale or asset valuation. Also, in United States v. United Shoe Mach. Corporation, 110 F. Supp. 295 (D. Mass. 1953), aff'd, 347 U.S. 521 (1954), compulsory licensing itself was held to not be punishment for prior abuse. I.d. at 351. Rather, compulsory licensing was necessary to "reduce monopoly power [obtained], not as a result of patents, but as a result of business practices. Thus, compulsory licensing, on a reasonable royalty basis, is in effect [only] a partial dissolution, on a non-confiscatory basis." Id.

²⁵⁰ See National Lead, 332 U.S. at 349.

²⁵¹ United States v. Hartford-Empire Co., 46 F. Supp. 541, 546 (N.D. Ohio 1942), aff'd in part, rev'd in part sub nom. Hartford-Empire Co. v. United States, 323 U.S. 386 (1945).
252 See id. at 594.

confiscatory than necessary to promote competition.²⁵³ In general, however, there seems to be no reason why those acting in restraint of competition should have a vested right to receive the benefits of unlawful acts through royalties.

Where patents are misused through business practices that violate the antitrust laws, or are attacked as to validity, compulsory patent licensing may often be the most reasonable non-confiscatory remedy, having only the effect of partial dissolution.²⁵⁴ On occasion, however,ee circumstances are serious enough to call for the elimination of *all* royalty payments, and, given the economic incentives toward subversion of the patent process, it would seem important to articulate discrete criteria under which royalty-free licensing—still considered unusual and severe in litigated antitrust cases and arguably unconstitutional²⁵⁵—would be anee appropriate remedy to impose in situations involving patent fraud.²⁵⁶

VI.ee PUBLIC POLICY, THE PUBLIC INTEREST IN WALKER PROCESS LITIGATION, AND THE UNIQUE UTILITYee OF COMPULSORY ROYALTY-FREE LICENSING: CRITERIA AND JUSTIFICATION FOR ITS USE IN PATENT FRAUD ANTITRUST VIOLATIONS

A. Consent Decrees

One significant problem in discerning or developing criteria for ace situation where a decree of compulsory free licensing might be appropriate in litigated matters is the peculiar nature of the consent decree and its impact in antitrust enforcement. Consent decrees are an important and

²⁵³ See Patent Dedication Note, supra note 244, at 724:

Decrees imposing unnecessary or inappropriate impairment of property rights are subject to reversal as much on the constitutional grounds of confiscation of property without due process as on abuse of discretion. *General Electric* construes *Hartford-Empire*, read together with *National Lead*, as making no sweeping prohibition of dedication or royalty-free licensing. It establishes a double requirement for dedication: if the essence of antitrust violation is monopolization of patents, and if the complete elimination of that monopoly is the key to restoration of competitive conditions, then dedication is a permissible remedy.

²⁵⁴ But see N. R. Powers, Comment, The Patent-Antitrust Balance: Proposals force Change, 17 VILL. L. Rev. 463, 468-70 (1972) (arguing that under these circumstances a patentee should be permitted to license whomever at terms "reasonable" to the enjoyment of its patent grant and, further, that the patentee should be allowed ample freedom in the manner of acceptable compensation for the licensing of its patent.)

²⁵⁵ See supra note 13 and accompanying text.

²⁵⁶ One type of case, for example, where an order of royalty free licensing would appear necessary is where the patent holder was disproportionately powerful over the other competitors in that requiring them to pay *any* royalties would keep them out entirely. *See* Improperly Procured Note, *supra* note 239, at 1519.

much-used means of enforcing the antitrust law.²⁵⁷ They are usually obtained by agreement for economic reasons peculiar to the parties, for reasons related to litigation strategy, or where, because of prior decisions or the flagrancy of the violations charged, the results of adjudication would be fairly certain.²⁵⁸

The forms of specific relief in consent decrees to which parties to antitrust cases have agreed when patents have been involved are varied. Most courts stress current economic considerations when deciding whether to order compulsory licensing (some concluding, as a result, that only in limited circumstances should there be *royalty-free* licensing);²⁵⁹ the emphasis of many other courts which have favored dedication or royalty-free licensing has been on past conduct instead.²⁶⁰ Royalty-free, non-exclusive, unrestricted licenses or sublicenses on patents, and even outright dedication, are, in any event, often found in consent decrees.²⁶¹

²⁵⁷ A consent decree is a negotiation between the Antitrust Division of the Department of Justice and an antitrust violator. It is an efficient alternative to complex, lengthy, and expensive litigation. See A. Bruce Campbell, Antitrust Consent Decrees: A Proposal to Enlist Private Plaintiffs in Enforcement Efforts, 54 Cornell L. Rev. 763, 763 (1969). Consent decrees also serve to clarify to other businesses what conduct the Department of Justice considers anticompetitive and subject to prosecution. See Andrea Berger Kalodner, Consent Decrees as an Antitrust Enforcement Device, 23 Antitrust Bull. 277, 278 (1978). As part of the negotiations, the defendant agrees to refrain from the 'offensive' conduct in exchange for the government forbearing formal prosecution (litigation). See Clark E. Walter, Consent Decrees and the Judicial Function, 20 Cath. U. L. Rev. 312, 315 (1970). The result is a consent decree, which must be ratified by the court. See id. at 315. The settlement of an antitrust case by consent decree is an administrative decision and, therefore, is not subject to judicial review, although the decree may be disproved by legal considerations. See United States v. Auto. Mfrs. Ass'n, 307 F. Supp. 617, 620-21 (C.D. Cal. 1969), aff'd per curiam sub nom. City of N.Y. v. United States, 397 U.S. 248 (1970).

²⁵⁸ See supra note 24; see also Neale & Goyder, supra note 173, at 380.

²⁵⁹ General Elec. Co., 115 F. Supp. at 844; see also Floyd H. Crews, Is It Necessary to Sacrifice Patent Property in Antitrust Consent Decrees? The Effect Upon the Patent System, 41 J. Pat. Off. Soc'y 801 (1959) (criticizing compulsory royalty free licensing in consent decrees where they receive no judicial review and as a result may be unnecessarily confiscatory).

²⁶⁰ See, e.g., United States v. Crescent Amusement Co., 323 U.S. 173, 189 (1944); United States v. Imperial Chem. Indus., 105 F. Supp. 215, 220-21 (S.D.N.Y. 1952).

²⁶¹ Consent decrees and orders which, for example, require partial divestiture, occasionally require ancillary relief aimed at *improving* the competitive condition of the pre-acquisition marketplace, including compulsory patent licensing, often royalty free. *See*, e.g., United States v.d.Inited Techs. Corp., 1980-1 Trade Cas. (CCH) ¶ 63,792 (N.D.N.Y. 1981); Eli Lilly & Co., 3 Trade Reg. Rep. (CCH) ¶ 21,612 (FTC 1980) (consent order requiring royalty-free licensing under existing insulin-related patents to any foreign company); United States v. Merck & Co., 1980-1 Trade Cas. (CCH) ¶ 63,682 (S.D. Cal. 1980); United States v. Am. Tech. Indus., Inc.,e 1974-2 Trade Cas. (CCH) ¶ 75,376 (M.D. Pa. 1974), *entered as final*, 1975-2 Trade Cas.ee (CCH) ¶ 60,467 (M.D. Pa. 1974) (judgment required manufacturer of artificial Christmas treesee to offer royalty-free licensing for all patents owned or developed by an illegally acquiredee manufacturer); Illinois Cent. Indus., Inc., 82 F.T.C. 1097 (1973) (consent order requiring,ee among other things, that corporation create a viable new entrant in the business of manufacturing auto brake friction materials by either divesting necessary equipment or providing the new entrant with sufficient financial aid or technical assistance and granting new firm royalty-freeee

These orders, however, are largely silent as to the specific legal justifications for chosen remedies.²⁶² This practice, consistent with Section 5 of the Clayton Act, expresses a public policy strongly encouraging settlement through consent decrees.²⁶⁵ Nevertheless, where they voluntarily substitute royalty-free licensing for the normal rules governing patents, antitrust consent decrees afford an opportunity to examine circumstances which parties themselves thought justified this remedy in many of the usual areas of patent system operation.

Consent decrees involving compulsory licensing are usually entered in cases where the government has alleged that patents are the source of the economic power by which a restraint of trade has been effected, and where courts can assume that, by opening patents to use by all for reasonable royalties, the prospects for restoring a competitive order are significantly increased. In *United States v. Spectra-Physics, Inc.*, 265 for example, the acquisition of another corporation by Spectra-Physics was alleged to violate Section 7 of the Clayton Act because it substantially lessened competition in the development, manufacture and sale of laser-based machine control products and systems. The proposed final consent judgment required, *inter alia*, the royalty-free licensing of patents on machine control laser technology. 266

licensing on related U.S. patents held by respondent); United States v. Hercules, Inc., 1973-1 Trade Cas. (CCH) ¶ 74,530 (D. Del. 1973); Continental Oil Co., 72 F.T.C. 850 (1967); Phillips Petroleum Co., 70 F.T.C. 456 (1966); see also United States v. Motor Vehicle Mfg. Ass'n of the United States, Inc., 643 F.2d 644 (9th Cir. 1981) (where it was alleged that the four leading automobile makers had used cross-licenses to suppress development of pollution control equipment, defendants accepted a consent decree under which they agreed to offer royalty-free licensing to anyone interested in developing air pollution control technology); International Tel. & Tel. Co. v. General Elec. Co., 351 F. Supp. 1153 (D. Haw. 1972) (litigated judgment), aff'd in part, rev'd in part, 518 F.2d 913 (9th Cir. 1975); Moore, supra note 177, at 228. For a typical pre-Walker Process consent decree, see United States v. Parke, Davis Co., 1951 Trade Cas. (CCH) ¶ 62,914 (E.D. Mich. 1951).

²⁶² See Moore, supra note 177, at 228-34 and note 19.

263 One of the most potent weapons available to the Antitrust Division is the fact that an antitrust defendant is often forced to avoid "investment decisions and business opportunities because of uncertainty regarding the outcome of litigation [and the] potential effects on the firm's future business practices" Moore, supra note 177, at 135 (citing 9 von Kalinowski, Antitrust Laws and Trade Regulation §§91.09(1)(b), 96.01(1)(a) (1992)). It is clear that the substantial immunity from private antitrust actions provided by consent decrees is a primary consideration in any defendant's willingness to negotiate them. Clearly justified orders of royaltyfree licensing in litigated cases, on the other hand, might open the "floodgates" of litigation seeking free licensing against other patentees. See Neale & Goyder, supra note 173, at 380.

²⁶⁴ See Kilgore, supra note 178, at 115; see also supra note 13.

²⁶⁵ No. C-78-1879-TEH, 1981 WL 2137, at *1 (N.D. Cal. Sept. 3, 1981).

²⁶⁶ See id.; United States v. Spectra-Physics, Inc. and Laserplane Corp.: Proposed Final Judgment and Competitive Impact Statement, 46 Fed. Reg. 31095, 31096-98 (1981); 1981-2 Trade Cas. (CCH) ¶ 64,290 (N.D. Cal. 1981) (consent decree).

The government originally sought divestiture of the acquired corporation's assets but ultimately concluded that compulsory royalty-free licensing would be adequate under these circumstances.²⁶⁷ Because of the nature of the product market and the current state of development, the acquired assets eventually had relatively less competitive importance, while Spectra-Physic's technology had relatively more importance:²⁶⁸ the market had experienced substantial entry by new competitors since the suit was filed, and compulsory royalty-free licensing could be expected to provide additional encouragement to new entry.²⁶⁹ Finally, divestiture would have been more difficult than in the typical Section 7 case because many of the assets were non-divisible.²⁷⁰ Therefore, the government concluded that royalty-free licensing would remedy the anticompetitive effects of the acquisition as adequately as divestiture:²⁷¹

Compulsory royalty-free licensing should remedy the increased concentration and the other anticompetitive effects of the acquisition. Existing competitors in the market may be able to [improve] their products and increase sales by obtaining licenses. Licensing may also attract new entry, particularly from manufacturers of heavy machinery which would be likely entrants but for their lack of [expertise] in laser systems. Licensing will also permit both new entrants and existing competitors to expand sales without the threat or fear of any suit for patent infringement.²⁷²

Free licensing decrees are also justified by the persuasive notion that the more serious the abuse of the patent system, the more severe should be the patent restriction.²⁷³ When royalty-free licensing is part of remedial rectification of past conduct that has seriously restrained competition, such as the fraudulent procurement of patents in order to control a nascent industry, the desired antitrust goals are more often achieved.²⁷⁴

²⁶⁷ See 46 Fed. Reg. at 31098 (The complaint alleged an illegal acquisition, the remedy for which would ordinarily be divestiture under Section 7 of the Clayton Act.).

²⁶⁸ See id.

²⁶⁹ See id.

²⁷⁰ See id.

²⁷¹ See id.

²⁷² Id. But see FTC v. Brunswick Corp., 3 Trade Reg. Rep. (CCH) \P 21,740 (F.T.C. 1980) (decree ordered divestiture but denied mutual royalty-free licensing of patents as unnecessary).

²⁷³ Serious abuses, for example, might be antitrust violations judged to be extremely contrary to public standards of fair play. See Improperly Procured Note, supra note 239, at 1511-12; see also Carney, supra note 139.

²⁷⁴ See Kilgore, supra note 178, at 116.

B.eePatent Antitrust, Public Policy, and the Argument for Royalty-Free Licensing under Walker Process

More than fifty years ago, the ineffectiveness of Justice Department cancellation suits,²⁷⁵ the most obvious remedy for fraudulently obtained patents, led to the suggestion that other possible approaches should at least be investigated.²⁷⁶ There is a heavy burden on the Patent Office and it is quite possible that patent fraud would not be challenged at all if not through antitrust litigation.²⁷⁷ The overwhelming quantity of possibly germane data, the relatively limited number of patent examiners, and a highly subjective statutory standard,²⁷⁸ render it nearly impossible to filter out invalid patents prior to their issuance.²⁷⁹ Making matters worse, it is still not clear that there is an obligation on the part of patentees to search for and disclose material information to the Patent Office; a duty of candor to the PTO exists only with regard to prior art known to the inventor.²⁸⁰

Nonetheless, the government has standing to challenge the validity of patents directly involved in antitrust violations, even if the patent was not relied upon as a defense.²⁸¹ Furthermore, attempts to *enforce* fraudulently obtained patents constitute violations of Section 5 of the FTCA.²⁸²

²⁷⁵ See supra note 95 and accompanying text.

²⁷⁶ See Note, Compulsory Patent Licensing by Antitrust Decree, 56 YALE L.J. 77, 117 (1946) [hereinafter Compulsory Patent Note] (suggesting the FTC, the Sherman Act and a defense by infringers of fraud on the Patent Office as possible alternatives).

²⁷⁷ The Patent Office checks formal requirements and examines to see if the invention is patentable based only upon the facts presented before the Patent Office. In applying for a patent before the United States Patent Office, the prosecution of the patent is accomplished *ex parte*, and the Patent Office typically takes the applicants' representations at face value. Therefore, parties willing to make false statements in the oath accompanying the application are not prevented from doing so. *See* Richard A. Joel, *Fraud in the Procurement of a Patent*, 49 J. Pat. Off. Soc'y 596, 597-98 (1967). The burden is on the examiner to indicate why the applicant is not entitled to a patent. *See* 35 U.S.C. § 132 (1994).

²⁷⁸ See generally Cullen & Vickers, supra note 14 (tracing the history and difficulties associated with the process of declaring a patent fraudulent).

²⁷⁹ See id. See generally Joel, supra note 277.

²⁸⁰ See 37 C.F.R. § 1.56(a) (1985).

^{28\(\}text{See}\) United States v. Glaxo Group Ltd., 410 U.S. 52, 56-58 (1973); see also Comment, Antitrust and Patents: Government's Standing to Challenge Patents in Antitrust Actions, 58 Minn. L. Rev. 307, 310 (1973) ("The government may now elect to attack the validity of a patent if it is sufficiently related to an antitrust violation without waiting for it to be asserted as a defense."); Keith J. Kanouse, Case Comment, 48 Notre Dame Law. 1355, 1361-62 (1973) (arguing that Glaxo impliedly overrules Bell Telephone, 167 U.S. 224 (1897), since Bell Telephone expressly denied the right of government to collaterally attack without fraud or deceit, and that Glaxo allows what is denied by statute); K. Gregory Erwin, Recent Developments, 8 Tex. Int'l. L.J. 421, 430 (1973) (The courts have consistently reduced the restrictions on challenging patents.). The criteria for challenging patents that emerged from Glaxo was that patents must be directly involved in antitrust violations; effective relief must involve restrictions on the patents involved; and the government must establish a substantial case for this relief. Id. at 428.

²⁸² See Kilgore, supra note 178, at 118.

These causes of action, and others which might result in remedies affecting patent rights,²⁸³ are often just as necessary to prevent assaults on the integrity of the patent process as restraints of trade.²⁸⁴ Moreover, even though they alleviate some of the burden on the Patent Office, "the opportunities for collusion and fraud are obvious, primarily in [settlements of] interference proceedings;"²⁸⁵ hence, agreements made between parties prosecuting competing patent applications are particularly offensive to the courts.²⁸⁶ The chances are great that parties to settlements are conspiring to avoid the requirement of prior art disclosure in direct derogation of the purpose of the patent system in order to restrain trade.²⁸⁷

Justice White suggested in Singer that termination of an interference should at least presumptively constitute an illegal restraint of trade.²⁸⁸ "Any hope for a permanent solution along these lines [, however, is] highly speculative,"²⁸⁹ largely because most such terminations are innocent:

[T]here is reason to believe that, unable for that reasonee [(that litigation is expensive)], to defend a . . . patentee

²⁸⁴ See Abraham S. Greenburg, Present Trends in Collateral Attacks on Patent Validity, 24 J. Pat. Off. Soc'y 746, 754 (1942); see also William H. Bryant, Fraudulent Patent Procurement as an Unfair Method of Competition, 16 Stan L. Rev. 729, 732 (1964) (The most effective remedy to correct serious restraints of trade and restore competition may often be royalty-free licensing.).

²⁸⁵ Improperly Procured Note, *supra* note 239, at 1508; *see also* Jerrold G. Van Cise, *Antitrust Laws and Patents*, 52 J. PAT. OFF. Soc'y 776, 784 (1970) ("[T]he effect of interference settlements by contending patent applicants...[may] result in the grant of patents based on how best to dominate an industry rather than who in fact made the inventions involved.").

²⁸⁶ "Evidence that Congress shares the judicial distrust of patent interference settlements is reflected by section 135(c) of the Patent Code . . . which requires any agreement or understanding between parties to an interference [in connection with the interference] to be filed with the Patent Office." Sigmund Timberg, Antitrust As pects of Patent Litigation, Arbitration and Settlement, 59 J. Pat. Off. Soc'y 244, 253-54 (1977).

²⁸⁷ See Joseph S. Iandiorio, Patent Pools and the Antitrust Laws, 46 J. PAT. Off. Soc'Y 712, 743 (1964).

²⁸⁸ United States v. Singer Mfg. Co., 374 U.S. 174, 200 (1963); see also Iandiorio, supra note 287 at 243-44.

²⁸⁹ Improperly Procured Note, *supra* note 239, at 1508.

²⁸³ It has also been argued, for example, that regardless of the *materiality* to the granting of a patent, any *deliberate misrepresentation* made with intent to affect the examiner's decision should constitute an unfair act or practice sufficient to invoke antitrust jurisdiction. *See generally* Carney, *supra* note 139. In addition, the enforcement of a patent which was procured by false statements may constitute a tort actionable in state court. *See, e.g.*, Becher v. Contoure Lab., 279 U.S. 388 (1929) (state court had jurisdiction to determine that a patent owner improperly stole an idea invented by plaintiff even though necessary result was invalidation of patent); Pratt v. Paris Gas Light & Coke Co., 168 U.S. 255 (1897) (state courts are competent to adjudicate the validity of a patent when that issue is raised collaterally); Crucible Chem. Co. v. Burlington Indus., Inc., 423 S.E.2d 121 (S.C. 1992); Coleman v. Whistnat, 35 S.E.2d 647 (S.C. 1945) (state court has jurisdiction in contract or tort action with respect to patent rights or the exercise of patent rights). *But see* Miller v. Lucas, 51 Cal.App.3d 774 (1975) (where *only* act alleged was filing of possibly fraudulent applications with patent office, state court has no jurisdiction).

suit, many [potential competitors] capitulate to a well financed patentee without litigating; the result is that many patents, which are 'spurious'—i.e., would probably not stand up in court, if contested—confer, in actual fact, . . . monopolies which are as effective . . . as if they had been judicially held valid. . . . But the exploitation of such a monopoly should not turn on such fortuitous circumstances.²⁹⁰

Once obtained, fraudulently procured patents may be used to harass and intimidate competitors and customers of potential competitors with suits²⁹¹ or threats of suits.²⁹² The fact that patents used to restrain trade may rest on spurious grounds becomes secondary for competitors. The expense of establishing that fact in the courts is usually prohibitive for those against whom these "weapons" are employed.²⁹³ Thus, patentees can capitalize on the understandable reluctance of competitors and customers in becoming involved in expensive and burdensome patent litigation.²⁹⁴ Even without actually suing customers, the owner of a fraudulently induced patent may dry up a competitor's potential market by placing its product under a cloud.²⁹⁵ There may also be multiple patents on which royalties must be paid during the substantial amount of time it takes for new entrants to develop their own patents in order to

²⁹⁰ Picard v. United Aircraft Corp., 128 F.2d 632, 641-42 (2d Cir. 1942).

²⁹¹ See, e.g., Handguards, Inc. v. Ethicon, Inc., 743 F.2d 1282 (9th Cir. 1984) (court upheld jury verdict finding that a patent suit was prosecuted in bad faith due in part because the patentee had knowledge that the patent was invalid), cert. denied, 469 U.S. 1190 (1985); W.L. Gore & Assoc., Inc. v. Carlisle Corp., 381 F. Supp. 680, 698-99 (D. Del. 1974) (patenteeoo offered to abandon patent infringement suit in exchange for licensing agreement); see alsooo supra note 159.00

²⁹² The effect of illegal harassment through threats of litigation is ameliorated, however, because 35 U.S.C. § 287 requires patentees to notify infringers of their acts of infringement as a prerequisite to the recovery of damages. Thus, a patentee is encouraged to give prior notification to customers. See Mark S. Bicks, Threatening to Sue For Patent Infringement: Unfair Competition and Antitrust Consequences, 59 J. Pat. Off. Soc'y 302, 302 (1977).

²⁹³ See Joseph Borkin, Patents and the New Trust Problem, 7 Law & Contemp. Probs. 74, 77 (1940). The patent suit had long been one of the most effective weapons in the continuation of the dominance of two companies in the drug field. See Brief of Amicus Curiae Mc-Kesson & Robbins, Inc., American Cyanamid Co. v. FTC, 363 F.2d 757 (6th Cir. 1966) (No. 15805).

²⁹⁴ Judge Posner has recognized that "[m]any claims not wholly groundless would never be sued on their own sake; the stakes, discounted by the probability of winning, would be too low to repay the investment in litigation [It may then be inferred] that the plaintiff wants to hurt a competitor not by getting a judgment against him, which would be a proper objective, but just by the maintenance of the suit, regardless of its outcome." See Arquit, supra note 30, at 746-47 (citing Grip-Pak, Inc. v. Illinois Tool Works, Inc., 694 F.2d 466, 472 (7th Cir. 1982), cert. denied, 461 U.S. 958 (1983)).

²⁹⁵ See David L. Ladd, Business Aggression Under the Patent System, 26 U. CHI. L. REV. 353, 362-67 (1959). See generally Michael Paul Chu, An Antitrust Solution to the New Wave of Predatory Patent Infringement Litigation, 33 WM. & MARYOL. REV. 1341 (1992).

avoid extensive and expensive litigation.²⁹⁶ Meanwhile, even though interrelated patents may be necessary to avoid technical difficulties,²⁹⁷ licensing costs can become prohibitive, especially when combined with the additional capital outlay necessary to engage heavily entrenched defendants.

Cross-licensing arrangements between dominant producers also have a unique potential for the suppression of competition, the deterioration of consumer purchasing power and the development of monopoly.²⁹⁸ The division and control of royalties gives the licensor power to control the market and tends to show a purpose to restrain trade.²⁹⁹ The dangers and likelihood of price collusion are accentuated when there are high barriers against entry such as restrictive patent arrangements.³⁰⁰ Therefore, if challenged patent licensing arrangements vest the combination with power to restrain trade, this is sufficient to bring the combination within the scope of the antitrust laws,³⁰¹ and remedies directed at patentees are appropriate if necessary to free potential new entrants from any possibility of charges of infringement.³⁰²

Antitrust remedies calculated to eliminate threats of infringement litigation are likely in situations where new entrants are seeking to compete in a high research industry and when, in addition to willful concealment of prior art, a court is disturbed by the deliberateness of the conduct

²⁹⁶ See Kilgore, supra note 178, at 105; see also Bryant, supra note 284.

²⁹⁷ See id. at 18, 20.

²⁹⁸ See United States v. General Elec. Co., 82 F. Supp 753, 799 (D.N.J. 1949); Borkin I, supra note 186, at 724.

²⁹⁹ See Van Cise, supra note 285. It is, however, not the presence of any single element of restraint so much as it is the entire collection of factors which threatens the security of the other members of an industry that creates the antitrust violation. See Wood, Patents and Antitrust Law 106 (1942).

³⁰⁰ See Joe Staten Bain, Industrial Organization 240-43 (1959).

³⁰¹ United States v. General Instrument Corp., 115 F. Supp. 582 (D.N.J. 1953).

^{302 &}quot;Patent interchanges must be the key that opens the door to competition, not the bolt that bars it." Iandiorio, *supra* note 287, at 742. Interference settlements and resulting crosslicensing agreements which do more than stipulate who is to receive the patent and grant nonexclusive license to each of the parties may also be open to scrutiny and a proper circumstance for compulsory licensing. *See* Frank Adam Elec. Co. v. Westinghouse Elec. Mfg. Co., 146 F.2d 165, 167 (8th Cir. 1945) ("A court of equity will not lend its aid to protect a patent monopoly when the owner of the patent is using it as an effective means of restraining competition with its sale of an unpatented article."); Davis, *Patent Licensing and the Antitrust Laws: Some Recent Developments*, 46 J. PAT. OFF. Soc'Y 12, 37 (1964); *see also* Mercoid Corp. v. Mid-Continent Co., 320 U.S. 661, 670 (1944). "'Where an important public interest would be prejudiced,' the reasons for denying injunctive relief 'may be compelling.' . . . That is the principle which has led this Court in the past to withhold aid from the patentee in suits for either direct or indirect infringement where the patent was being misused." *Id.*

before the patent examiner.³⁰³ Under these circumstances,³⁰⁴ the Justice Department often requests relief in the form of royalty-free licensing.³⁰⁵ New competitors require assistance of a substantial nature to enable them to overcome the lead-time which defendants reap from unlawful actions,³⁰⁶ and even under favorable circumstances, they might not find a market.

Antitrust remedies are a late cure for conditions which have festered for a long time and have been profitable for those responsible. These

³⁰³ See Lawrence R. Hefter, An Applicant's Duty to Disclose Prior Art, 45 J. Pat. Off. Soc'y 128, 129 (1963). Such relief is not objectionable as confiscatory and punitive if the situation is serious enough to require the remedy. See also Improperly Procured Note, supra note 239, at 1505.

Despite the intimations of *Hartford-Empire* and *National Lead* there would seem to be no serious constitutional barrier to such orders in judicial antitrust decrees. The only cases cited in *Hartford-Empire* as raising possible constitutional problems held that a patent is property which may not be taken for public use without compensation. Here, however, where the patents are being taken not for public use but as remedy for unfair practices, the only substantive constitutional issue would be whether there is a rational connection between the offense and the remedy.

Id. at 1518.

304 As part of its obligation to avoid charges of overreaching, in that the government's Patent Office "gave" and the Justice Department (or the FTC) would be "taking away," the government is on even more sympathetic ground in asking for invalidation when bringing newly discovered matter before the court because it is logical to repudiate a bargain for fraud, and suppression of facts known to the applicant might well be considered fraud. See Harris, supra note 134, at 48; Improperly Procured Note, supra note 239, at 1515.

³⁰⁵ See Bryant, supra note 284. In Inre American Cyanamid Co., 63 F.T.C. 1747 (1963). for example, the Justice Department argued (and the FTC held) that the totality of the patentee's behavior amounted to a violation of Section 5 and that the Commission had jurisdiction to remedy the non-competitive situation by ordering compulsory royalty-free licensing to restore competition. The validity of the patent was not at issue but the FTC's proposed order would have prohibited one defendant from any enforcement of its patent rights (compulsory royalty-free licensing) because any vindication of rights related to the patent would inappropriately imply legitimacy: "the essence of the violation stems from the possession of a patent monopoly which [the defendant] has no standing or right to exert in view of the means by which it was obtained." Memorandum in Support of Proposed Form of Order Relating to Patents at 7, In re American Cyanamid Co., 63 F.T.C. 1747 (1963) (No. 7211). In the Memorandum in Support of the Proposed Form of Order, id., the FTC, in discussing the argument that royalty-free licensing is confiscatory, pointed out that only if anti-competitive effects cannot otherwise be eliminated, would royalty-free licensing be appropriate. (In National Lead, for example, free licensing would have been confiscatory. The patents used to violate the Sherman Act were valid, untainted by inequitableness or fraud.) However, where a patentee obtains a patent through inequitable conduct before the patent office, no question of confiscation of property rights can exist, and disallowing enforcement of a patent is a reasonable nonpenal disposition. See id. at 8. Under these circumstances, since the patentee can never purge itself of the fraudulent conduct, royalty-free licensing will often be the best way to dissipate the anti-competitive effects of the fraudulent patent. See id. at 11. Where only "misuse" is at issue, there is somewhat more confusion over whether or not to engage in royalty-free licensing when framing an effective antitrust decree. See generally Roland W. Donnem, The Antitrust Attack on Restrictive Patent License Provisions, 14 Antirkust Bull. 749 (1969).

³⁰⁶ Reply to Pfizer's & Cyanamid's Memorandum in Opposition to a Further Order at 12, *In re* American Cyanamid Co., 63 F.T.C. 1747 (1963) (No. 7211).

conditions have developed a power of resistance to change not readily overcome. So long as patents are not canceled and licensing is not ordered on a non-restrictive basis, patentees continue to be free to grant or withhold licenses at their pleasure. The striking of one set of restrictive license conditions may only lead to the adoption of another set of conditions which achieve the same anticompetitive result. Thus, difficulties new entrants may have in competing with a large or dominant defendant must often be neutralized by giving potential competitors a more favorable position. Consequently, courts penalize patentees who violate antitrust laws by denying enforcement, so well as by compelling the grant of industry wide licenses.

Fraudulently obtained patents, however, not only restrain the free economy the patent clause sought to foster,³¹¹ but defeat the fundamental purpose of the patent system.³¹² Thus, fraud in obtaining patents later found to have been used to restrain trade should easily dictate a policy of even more expansive compulsory licensing than might be justified in rehabilitating anti-competitive situations resulting simply from misuse of a valid patent.³¹³

[T]here is a distinction between a patent invalid force wrongful procurement and a situation where valid pat-

³⁰⁷ This, of course, will be ineffective in breaking up the monopoly. *See* Compulsory Patent Note, *supra* note 276, at 82.

³⁰⁸ See Marcus, supra note 174, at 36-51. A key public policy objective with regard to patent matters is competition in the making as well as the marketing of new inventions. See George E. Frost, The Case Against Drug Patent Compulsory Licensing, 7 Pat. Trademark & Copyright J. Res. & Educ. 84, 89 (1963).

³⁰⁹ See supra notes 39-41 and accompanying text.

³¹⁰ See Benton Baker, Patent Rights and the Antitrust Laws, 34 J. PAT. OFF. Soc'y 688 (1952). In most cases of compulsory licensing, patents were used in connection with practices not contemplated by the patent laws. That is, some defendants have been guilty of misuse of patents as part of antitrust violations. See Kilgore, supra note 178, at 138. The patentee's business practices created a monopoly and this remedy became necessary. See Moore, supra note 177, at 233.

³¹¹ See Borkin I, supra note 186, at 723.

It is necessary that we constantly remind ourselves of the original intention of the patent law, *i.e.*, to promote the progress of science and the useful arts. In furtherance of this objective, the Constitution provided for an *exception* to the principles of common law, which consistently condemned monopoly in the economic system.

Id. (footnote omitted); see also United States v. Masonite Corp., 316 U.S. 265, 278 (1942) ("[T]]he promotion of the progress of science and the useful arts is the 'main object'; reward of inventors is secondary and merely a means to that end.").

³¹² Only in the event that an invention contributes to progress in the sciences or useful arts is the patentee entitled to reward because this is the fundamental purpose of the patent system. *Masonite*, 316 U.S. at 278.

³¹³ See United States v. Singer Mfg. Co., 374 U.S. 174, 200 (1963) (White, J., concurring). The Supreme Court has tended to treat similar business arrangements differently because of differences not material to the economic consequences of the arrangements. "[T]his Court has quite consistently refused to allow the form into which the parties chose to cast the transaction to govern." *Id.*

ents have been used to [monopolize. Prior] cases hesitated in granting [royalty-free licensing] as the patents were otherwise [valid, but it may be the] only logical remedy for an improperly procured patent, since it alone would put the patentee in the position [it] would have been in if the Patent Office had detected the improper conduct in the first place.³¹⁴

This reasoning, however, does not fully address the objection that an antitrust decree is supposed to suppress economic restraints and restore economic equilibrium, not cure infractions against the Patent Office. Nevertheless, where the Sherman Act is involved "the crucial fact is the impact of the particular practice on competition" and the Antitrust Division does have the jurisdiction to both enforce the Sherman Act and sue to cancel a patent. Whether it appears that the Sherman Act has been violated by procurement or by misuse of a patent which should not have even been granted, a single decree should be able to cure the entire situation; especially where the same conspiracy that restrained competition—intentional patent fraud—is also a potential ground for cancellation. 318

Finally, it should be remembered that, inevitably and unavoidably, patents impose a burden of higher prices on the public.³¹⁹ Patentees' rights, however, should not impose price uniformity and market rigidity

Divestiture or dissolution must take account of the present and future conditions in the particular industry as well as past violations. It serves several functions: (1) It puts an end to the combination or conspiracy when that is itself the violation. (2) It deprives the antitrust defendants of the benefits of their conspiracy. (3) It is designed to break up or render impotent the monopoly power which violates the Act. (emphasis added).

Therefore, antitrust remedies may include depriving a violator of the weapons used to make his conduct effective through royalty-free licensing. *See, e.g.*, United States v. Crescent Amusement Co., 323 U.S. 173, 188 (1944); Chain Institute, Inc. v. FTC, 246 F.2d 231, 235 (8th Cir. 1957).

³¹⁴ See Improperly Procured Note, supra note 239, at 1519; see also Bryant, supra note 284.

³¹⁵ FTC v. Motion Picture Adver. Serv. Co., 344 U.S. 392, 397 (1953).

^{316 15} U.S.C. §4 (1992).

³¹⁷ See supra notes 43-50, 95.

³¹⁸ Tribunals that decide an antitrust case brought on behalf of the public should possess relief powers equal to those available in suits between private parties, and vice-versa. Report of the Attorney-General's National Committee to Study the Antitrust Laws 258 (1955). The most appropriate steps under the particular circumstances must be taken to cure the effects of illegal conduct and assure the public freedom from its continuance. One justification for an antitrust remedy is the removal of violations. *See* Gilbertville Trucking Co. v. United States, 371 U.S. 115 (1962). However, as noted in Schine Chain Theaters v. United States, 334 U.S. 110, 128 (1948):

³¹⁹ See Tom Arnold & Paul Janicke, Compulsory Licensing Anyone?, 55 J. Pat. Off. Soc'y. 149, 156 (1973) (includes a proposed statute for compulsory licensing after a four year period from the date of filing, making an action pursuable by a prospective licensee).

in total disregard of the interest of consumers in obtaining vital products at reasonable prices. While higher prices may be the legitimate and unavoidable cost of encouraging technological advancements, if patents should never have been issued, the public is unjustifiably encumbered unless any resulting illegal monopoly is rooted out and competitive pricing re-established. The use of compulsory patent licensing to re-establish competitive pricing still involves the fixing and paying of royalties and may be inadequate in eliminating the unlawful control over the market. Dedication, which makes all patent rights permanently available to the public, is essentially cancellation or divestiture without compensation. It provides no incentive for a defendant to aid in restoring competition and imposes a permanent loss. Thus, dedication can only be imposed if essential to prevent and restrain violations and restore competition. Secondary of the provides of the provide

The imposition of temporary, royalty-free licensing, however, can effectively free competition in a given industry without permanently depriving the patentee of its patent rights,³²³ an approach which would be presumptively inappropriate in antitrust decrees.³²⁴ Such relief encourages a defendant to share technology and aid in restoring competition through the incentive of a return to full patent rights and privileges once illegal restraints are ended. Therefore, when a case does not warrant dedication (that is, it does not meet the narrow criteria of *General Electric*³²⁵) royalty-free licensing may have significant tactical advantages over dedication, divestiture, or compulsory reasonable royalties.

The proper occasions for the use of royalty-free licensing are reasonably easy to discern. First, a decree ordering royalty-free licensing must be essential to prevent future unlawful practices as well as undo the effects of past conduct. Royalty-free licensing is most justifiable, from a public policy point of view, in antitrust litigation in which the only effective way to treat the results of unlawful conduct is by barring conduct—the collection of reasonable royalties—which would otherwise allow un-

³²⁰ Before the FTC acted in *American Cyanamid*, for example, the wholesale and retail prices for the drug at issue in Italy, where there was heavy competition, were about 25 percent of its price in the U.S. *See* Improperly Procured Note, *supra* note 239, at 1509-11.

³²¹ See generally Compulsory Licensing Note, supra note 230 and cases cited.ee

³²² Since dedication as opposed to royalty-free licensing is primarily penal in nature, it should rarely be used in an antitrust decree. *See* Moore, *supra* note 177, at 239. Otherwise, dedication permanently penalizes the patentee for past wrongs without necessarily effectuating a restoration of competition. *See also* United States v. Crescent Amusement Co., 323 U.S. 173 (1944); United States v. Imperial Chem. Indus., 105 F. Supp. 215 (S.D.N.Y. 1952); text accompanying *supra* note 260.

³²³ See Compulsory Licensing Note, supra note 230, at 547.ee

³²⁴ See FTC v. Royal Milling Co., 288 U.S. 212 (1933); Jacob Siegel Co. v. FTC, 327ee U.S. 608 (1946); text accompanying supra note 129.

³²⁵ United States v. General Elec. Co., 115 F. Supp. 835 (D.N.J. 1953); see supra note 201 and accompanying text.

lawful economic effects to continue unmitigated.³²⁶ Where patents have simply been "misused" to illegally monopolize, courts have hesitated in granting royalty-free licensing and limiting property rights because patent *use* and not *validity* was being attacked;³²⁷ but if a patent in issue is found to be fraudulently procured, the existence and exercise of patent rights for a long time may warrant more than a mere injunction that future royalties be reasonable.³²⁸

Second, the alternative of dedication must be unreasonable. For example, if competition would be *impeded* by permanently removing a defendant's patent rights, then imposing a reasonable, temporary loss of the fruits of the patentee's fraud (and weapons of unfair competition) would be more appropriate. More often than not, dedication will be unreasonably punitive rather than remedial.³²⁹ In *Hartford-Empire*,³³⁰ for instance, the defendant produced nothing; it was mainly a patent holding and licensing company engaged in research and development.³³¹ Even potential and existing licensees took the position that reasonable royalty licensing was preferable to dedication.³³² The peculiar economic situation in the industry made continued research important, and the economic health of all those in the affected industry was largely dependant upon a continuation of royalties.³³³ In many cases, even *defendants* have believed that royalty-free licensing was to their economic advantage as compared to dedication.³³⁴

Third, the fixing of reasonable royalties must be difficult. This would be the case where royalties have not been established or, in looking at total conduct, none can reasonably be estimated.³³⁵ Fourth, be-

³²⁶ Sandura Co. v. FTC, 339 F.2d 847, 860-61 (6th Cir. 1964).

³²⁷ See, e.g., United States v. Singer Mfg. Co., 374 U.S. 174 (1963).

³²⁸ See Atlantic Refining Co. v. FTC, 381 U.S. 357 (1965). It may not even be clear what "reasonable" means under these circumstances.

³²⁹ See id.

³³⁰ Hartford-Empire Co. v. United States, 323 U.S. 386 (1945).

³³¹ United States v. Hartford-Empire Co., 46 F. Supp. 541, 594 (N.D. Ohio 1942), aff'd in part, rev'd in part sub nom. Hartford-Empire Co. v. United States, 323 U.S. 386 (1945).

³³² See Hartford-Empire Co., 323 U.S. at 437.

³³³ See Kilgore, supra note 178, at 117.

³³⁴ See id.

³³⁵ See United States v. National Lead Co., 332 U.S. 319, 349 (1947); see also FTC v. Beech-Nut Packing Co., 257 U.S. 441, 453-54 (1922); United States v. American Optical Co., 95 F. Supp. 771, 776 (S.D.N.Y. 1950). In infringement cases, for example, where the plaintiff has neither manufactured the patented product nor licensed others at an established royalty rate, the court must hypothesize a reasonable royalty upon which the parties would have agreed prior to the commencement of the infringement. See Trilogy Communications, Inc. v. Comm Scope Co., 754 F. Supp. 468, 512 (W.D.N.C. 1990); Ellipse Corp. v. Ford Motor Corp., 461 F. Supp. 1354, 1379 (N.D. Ill. 1978), aff'd., 614 F.2d 775 (7th Cir. 1979), cert. denied, 446 U.S. 939 (1980). In setting a royalty, courts must discern and consider every economic factor that normally prudent entrepreneurs would consider under similar circumstances. See Georgia-Pacific Corp. v. U.S. Plywood Corp., 318 F. Supp. 1116, 1120 (S.D.N.Y. 1970), cert.

cause of extremely entrenched advantages, cessation of the offending activity must be essential, and the likelihood must be high that, as a result of imposing this remedy, the defendant cannot again resume the same or a related activity.³³⁶ Often,

advantages already in hand may be held by methods more subtle and informed, and more difficult to prove, than those which, in the first place, win a market. When the purpose to restrain trade appears from a clear violation of law, it is not necessary that all of the untraveled roads to that end be left open and that only the worn one be closed.³³⁷

Royalty-free licensing seems appropriate, therefore, in an infant industry where permitting *any* licensing is likely to invite continued abuses through stealth and concealment.

Fifth, the factual circumstances must be such as to allow any decree to be precise in intent, reasoning, and application. Courts must provide clear indications of why royalty-free licensing is necessary to end unfair competition, and any decree must explain why specific economic violations are deemed serious enough for the remedy used. Thus, if enforcement becomes necessary, the actions to be taken must be clear.

Sixth, where continued enforcement of a patent is deemed economically necessary even though it would have the practical effect of continuing a restraint of trade, there should be no remedy more effective (or equally effective but less punitive) in removing the violation. Evidence of a continuing restraint of trade that is sufficiently detrimental to the public so as to require royalty-free licensing, for example, might be maintaining rigid prices on patented products in spite of a steady price decline displayed by similar unpatented products. Increasingly efficient production methods, coupled with the persistent competitive pressures resulting from free entry, should make possible an ultimate decrease in the price of what are often extremely vital products.³³⁸

The problem, however, is not solely a lack of criteria for the application of royalty-free licensing. Resources (and political support) for the antitrust agencies and the Patent Office, those entities ordinarily entrusted to discover and eliminate patent fraud and illegal control over

denied, 404 U.S. 870 (1971) (setting forth factors to be considered under what has become known as the "analytical approach"); see also TWM Mfg. Co., Inc. v. Dura Corp., 789 F.2d 895, 900 (Fed. Cir. 1986), cert. denied, 479 U.S. 852 (1986).

³³⁶ See, e.g., Country Tweeds, Inc. v. FTC, 326F.2d 144, 149 (2dCir. 1964) (holding that the FTC order must be specifically directed at eliminating the unlawful conduct); Swanee Paper Corp. v. FTC, 291 F.2d 833, 838 (2d Cir. 1961).

³³⁷ International Salt Co. v. United States, 332 U.S. 392, 400 (1947).

³³⁸ See Henry Steele, Monopoly and Competition in the Ethical Drugs Market, 5 J.L. & Econ. 131, 138 (1962).

markets, are increasingly diminishing.³³⁹ At the same time, the market for the products of modern technology and the corollary economic incentives to obtain patents at any cost are greatly increasing.³⁴⁰ This suggests that the government is losing its ability (if it has not already been lost) to control unfair competition achieved through largely undetected, spurious patents, and to protect consumers from unnecessarily exorbitant prices for the wide array of technology-dependent commodities which have become vital to our society.

In practice, virtually the only limits the government (or potential competitors) can impose on this behavior are those limits the corporations engaged in patent fraud to further illegal monopolies will *accept* (through consent decrees).³⁴¹ This sad circumstance raises a question that is—at least in the area of patent-fraud antitrust—not unreasonable: does the government still have *any* capacity to regulate corporate patent practices or have corporations finally, insidiously, gained effective control over the governmental processes designed to control them?³⁴²

It would seem that judicial support for, and protection of, consumers' and competitors' rights through the antitrust laws is the only real guarantee that entrepreneurs will conform their patent (and Patent Office) behavior to law. Both the incentives and the ability to enforce antitrust laws have substantially diminished within the political branches since the 1960s,³⁴³ when the Supreme Court confirmed the legitimacy, under proper circumstances, of both patent fraud antitrust claims³⁴⁴ and compulsory royalty-free licensing as an equitable remedy.³⁴⁵ Yet, notwithstanding the urgent need for the vigorous maintenance and reinforcement of such claims and remedies to protect the American public from corporate patent predation, the contemporary judicial solicitude toward patents and patent rights continues to prevail.^{346ee}

Defendants in patent infringement cases, for example, assert fraudulent procurement or enforcement of patents as affirmative defenses as a matter of course.³⁴⁷ By 1989, however, only one decision had been reported in which an alleged infringer obtained recovery for a litigated Sherman Act offense involving inequitable conduct of any kind, "and

³³⁹ See supra notes 5, 8-11, 277-80 and accompanying text.

³⁴⁰ See supra notes 4-7 and accompanying text.

³⁴¹ See supra notes 257-62 and accompanying text.

³⁴² See supra notes 2-3, 20-22 and accompanying text.

³⁴³ See supra notes 5, 8-11, 277-80 and accompanying text.

³⁴⁴ See supra notes 157-65 and accompanying text.

³⁴⁵ See supra notes 182-207.

³⁴⁶ See, e.g., Sobel, supra note 172.

³⁴⁷ See generally Wm. Marshall Lee, Proving a Walker Process Antitrust Claim, 59 ANTITRUST L.J. 661 (1991).

that was not the usual fraud."³⁴⁸ Cases in which antitrust claims have been premised on patent fraud "have almost always failed, [particularly] when the claim has been based on alleged misconduct other than traditional fraud;"³⁴⁹ where antitrust liability on counterclaims to infringement suits has been imposed under *Walker Process*, the patentee's conduct was so egregious that it left no doubt that the infringement suit was objectively baseless.³⁵⁰

There continues to be, therefore, much danger to consumers (and free trade) posed by patent fraud. Decreasing resources are available to combat the problem, and important public policies militate in favor of the use of compulsory-free licensing as an antitrust remedy. As a consequence, the Federal Circuit should revitalize *Walker Process* claims by

³⁴⁸ Sobel, *supra* note 172, at 694 (citing Kearney & Trecker Corp. v. Cincinnati Milacron, Inc., 562 F.2d 365 (6th Cir. 1977) (liability found based on patentee's retention of a retired Patent Office examiner to assist in a reissue application where he had been involved in the original patent application).

^{349 1} WILLIAM C. HOLMES, INTELLECTUAL PROPERTY AND ANTITRUST LAW, § 15.03, at 15-17 (1983). Cases succeeding in imposing antitrust liability based upon the enforcement of ee fraudulently or inequitably procured patents include: Kearney & Trecker Corp. v. Cincinnatiee Milacron, Inc., 562 F.2d 365, 372 (6th Cir. 1977) (same violation manifested intention . . . toee the same degree as if the original patent had been procured by fraud") (liability found based on patentee's retention of a retired Patent Office examiner to assist in reissue application where he had been involved in the original patent application); Kearney & Trecker Corp. v. Giddings & Lewis, Inc., 452 F.2d 579, 595 (7th Cir. 1971), cert. denied, 405 U.S. 1066 (1972) (violation of proscriptions against conflicts of interest involved "the same threat to the public interest asee actual fraud" upon the Patent Office); Charles Pfizer & Co. v. FTC, 401 F.2d 574 (6th Cir.ee 1968), cert. denied, 394 U.S. 920 (1969); Arcade, Inc. v. Minnesota Mining & Mfg., Co., No. CIV-1-88-141, 1991 WL 429344 (E.D. Tenn., Jun. 7, 1991); Conceptual Engineering Assocs., Inc. v. Aelectronic Bonding, Inc., 714 F. Supp. 1262 (D.R.I. 1989); SCM Corp. v. Radio Corp. of Am., 318 F. Supp. 433 (S.D.N.Y. 1970). There are also several cases in which a Walker Process claim has survived a motion for summary judgment or dismissal even though theee claims were not adjudicated. See, e.g., Buehler AG v. Ocrim, S.P.A., 1992-2 Trade Cas.ee (CCH) ¶ 70,077 (N.D. Tex. 1992) (survived motion for summary judgment); Grid Systems Corp. v. Texas Instruments, Inc., 771 F. Supp. 1033 (N.D. Cal. 1991) (survived motion toee dismiss); Burbank Aeronautical Corp. II v. Aeronatical Dev. Corp., 16 U.S.P.Q.2d 1069 (C.D. Cal. 1990) (survived motion for summary judgment); Rohm & Haas Co. v. Dawson Chem.ee Co., 635 F. Supp. 1211 (S.D. Tex. 1986) (survives motion for summary judgment).ee

³⁵⁰ See, e.g., Arcade, Inc. v. Minnesota Mining & Mfg., Co., No. CIV-1-88-141, 1991 WL 429344 (E.D. Tenn., Jun. 7, 1991); Conceptual Eng'g Assocs., Inc. v. Aelectronic Bonding, Inc., 714 F. Supp. 1262 (D.R.I. 1989); see also Glaverbel Societe Anonyme v. Northlake Mktg., 45 F.3d 1550 (Fed Cir. 1995); Carroll Touch, Inc. v. Electro Mechanical Sys., Inc., 15 F.3d 1573 (Fed. Cir. 1993); Technicon Instruments Corp. v. Alpkem Corp., 866 F.2d 417 (Fed. Cir. 1989); Burlington Indus. Inc. v. Dayco Corp., 849 F.2d 1418 (Fed. Cir. 1988); Argusee Chem. Corp. v. Fibre Glass-Evercoat Co., 812 F.2d 1381 (Fed. Cir. 1987); Kimberly Clarkee Corp. v. Johnson & Johnson, 745 F.2d 1437 (Fed. Cir. 1984); E.I. duPont de Nemours v.ee Berkley & Co., Inc., 620 F.2d 1247 (8th Cir. 1979); Norton Co. v. Carborundum Co., 530 F.2d 435 (3d Cir. 1976); Zenith Lab., Inc. v. Carter-Wallace, Inc., 530 F.2d 508 (3d Cir. 1976); Becton, Dickinson & Co. v. Sherwood Med. Indus., Inc., 516 F.2d 514 (5th Cir. 1975); Robert L. Harmon, Patents and the Federal Circuit §9.5(a), at 285 (2d ed. 1991) ("the [courts are] disinclined to uphold on inequitable conduct defense in the absence of truly egregious conduct").ee

carving out exceptions to their general solicitude toward patents. These exceptions might take the form of reducing the degree of the dichotomy between "inequitable conduct" (a relatively new, subtle judicial re-characterization of certain quasi-fraudulent behavior), and customary patent fraud, allowing both to support antitrust claims.³⁵¹ In the alternative, the judges of that Circuit might consider reducing the stringency of the test for holding "misrepresentations" to the Patent Office sufficiently material to invoke Walker Process antitrust jurisdiction,³⁵² or treat omissions of prior art as they do misrepresentations of prior art. Even assuming that much of the antitrust jurisprudence of the 1960s may now fairly be characterized as misguided,³⁵³ the potential danger to consumers, and the important public policies that flow from the contemporary judicial failure to provide exceptions to present doctrine in the area of patent fraud antitrust, is enormous.

CONCLUSION

Antitrust decrees should go no further than reasonably necessary under the circumstances to correct restraints on free trade or reserve the

³⁵¹ The dichotomy would seem to have been established by 1972, with the strict reading of Walker Process found in Cataphote Corp. v. DeSoto Chem. Coatings, Inc., 450 F.2d 769 (9th Cir. 1971), cert. denied, 408 U.S. 929 (1972); see Korody-Colyer Corp. v. General Motors Corp., 828 F.2d 1572, 1578 (Fed. Cir. 1987) (in a case where an antitrust plaintiff successfully proved fraud, the court indicated that there is an important "difference between inequitable conduct that may render a patent unenforceable and intentional fraud that may lead to antitrust liability. 70; see also Pro-Mold and Tool Co., Inc. v. Great Lakes Plastics, Inc., 75 F.3d 1568 (Fed. Cir. 1996); Fox Indus., Inc. v. Structural Preservation Sys., Inc., 922 F.2d 801 (Fed Cir. 1990); Hewlett-Packard Co. v. Baush & Lomb, Inc., 882 F.2d 1556 (Fed. Cir. 1989); Kingsdown Med. Consultants, Ltd. v. Hollister, Inc., 863 F.2d 867 (Fed. Cir. 1988) (inequitable conduct rendering a patent unenforceable is broader than common law fraud and includes not only affirmative misrepresentation but half-truths or omissions with intent to deceive); FMC Corp. v. Manitowoc Co., 835 F.2d 1411 (Fed. Cir. 1987); Argus Chem. Corp. v. Fibre Glass-Evercoat Co., 812 F.2d 1381 (Fed. Cir. 1987); E.I. duPont de Nemours v. Berkley & Co., 620 F.2d 1247, 1274 (8th Cir. 1980) ("inequitable conduct short of fraud can be a defense in aoo patent infringement suito but cannot support an antitrust claim for damages and other injunctive relief beneficial to the public); Brunswick Corp. v. Riegel Textile Corp., 752 F.2d 261 (7thoo Cir. 1984); Becton, Dickinson & Co. v. Sherwood Med. Indus., Inc., 516 F.2d 514, 521 (5thoo Cir. 1975).oo

³⁵² The requirement of a showing of the "but foro materiality required for fraud under antitrust law is more stringent than the showing required to render a patent unenforceable based on inequitable conduct in the Patent Office. Compare Rohm & Haas Co. v. Dawson Chem. Co., 635 F. Supp. 1211, 1218 (S.D. Tex. 1986), and Litton Indus. Prods., Inc. v. Solid State Sys. Corp., 755 F.2d 158, 166 (Fed. Cir. 1985) ("[m]ateriality is shown if 'but for' the misrepresentation, the patent would not have issuedo, with Merck & Co. v. Danbury Pharmacal, Inc. 873 F.2d 1418, 1421 (Fed. Cir. 1989) ("Materiality [for inequitable conduct] may be established . . .tby a showing that a reasonable examiner would consider the withheld prior art important in deciding whether to issue the patent. (emphasis added). But see Camey, supra note 139.

³⁵³ See Hughes, supra note 25.

rights of competitors and the public;³⁵⁴ where patents are being restricted as a remedy for unfair practices, there must be a rational connection between the offense and the remedy. However, if important public policies are to be effectuated, deliberate misrepresentations made with the intent to affect a Patent Office decision should be considered an unfair method of competition, even if standards for what constitutes a misrepresentation must be relaxed.³⁵⁵ If evidence of facts unknown to the Patent Examiner is adduced in an antitrust prosecution tending to show an illegal conspiracy to obtain an invalid patent, the complainant should be able to demand an equitable and appropriate antitrust remedy,³⁵⁶ and compulsory royalty-free licensing will often be just such a remedy.

In the recent past, there has been much resistance to patent antitrust enforcement,³⁵⁷ and thus a somewhat spare use of royalty-free licensing as a remedy for fraudulent procurement of patents. The extreme forms of economic abuse that flow from patent fraud, however, so basically violate the fundamental policy behind the patent and antitrust laws that the importance and crucial utility of *Walker Process* claims should be firmly acknowledged and re-vitalized; ideally, this form of litigation should be resuscitated and reinforced.

As a result, compulsory royalty-free licensing should be more frequently imposed—not only through consent decrees, but in litigated *Walker Process* cases—in light of the serious consequences patent fraud presents for freedom of competition and the ability of our society to con-

³⁵⁴ See United States v. Imperial Chem. Indus., 105 F. Supp. 215 (S.D.N.Y. 1952).

³⁵⁵ Recently, for example, the United States Court of Appeals for the Federal Circuit reversed itself on the issue of Walker Process liability so as to expand that cause of action drastically. See Nobelpharma AB v. Implant Innovations, Inc., No. 96-1463, 1998 WL 122399 (Fed. Cir. Mar. 20, 1998). Last November, that Court had held that Walker Process liability ocannot be based on a patent applicant's knowing failure to cite a prior art reference because, while applicants owe a duty of candor to the PTO, Walker Process cases traditionally distinguish between omissions and affirmative misrepresentations, and imposing antitrust liability for failure to cite prior art would convert most patent infringement actions into antitrust cases. See Patents—Antitrust Counterclaims, 66 U.S.L.W. 1384 (1997). Nevertheless, the Federal Circuit has now "made an about-face on the substantive . . . legal issue, bolding that "a fraudulent omission can be just as reprehensible as a fraudulent misrepresentation and that, assuming all other elements are present, both should allow for Walker Process liability. Federal Circuit Reconsiders, Says Omissions of Prior Art May Result in Antitrust Liability, 66 U.S.L.W. 1604 (1998).

³⁵⁶ See Herbert Hovenkamp, Antitrust Policy and the Social Cost of Monopoly, 78 Iowa L. Rev. 371, 374 (1993):00

Presumably, a perfectly efficient antitrust policy would minimize the total socialoo losses caused by monopoly rent seeking of the kind that is reachable under the antitrust laws. Antitrust would do this by minimizing the sum of (a) the costs to the consumer imposed by monopoly pricing and output reduction; (b) the costs to the monopolist of inefficient exclusionary practices; (c) the costs that inefficient exclusionary practices impose on third parties; and (d) the costs of operating the system that detects these things, adjudicates them, and punishes violators.

³⁵⁷ See supra notes 349-50 and accompanying text.

trol corporate patentees. Free licensing is not punitive; it does not permanently remove title to intellectual property, and it is often necessary to hold out sufficient incentive to defendants to actively aid in restoring competition. Tribunals required to adjudicate antitrust matters and fashion antitrust decrees must become more receptive to Walker Process claims and exercise greater use of the unique remedy of royalty-free patent licensing if our society is to maintain any hope of preserving free competition in future markets for technology-based goods or products.