

University of Pennsylvania Carey Law School

Penn Law: Legal Scholarship Repository

Faculty Scholarship at Penn Law

2009

Patents, Property, and Competition Policy

Herbert J. Hovenkamp

University of Pennsylvania Carey Law School

Follow this and additional works at: https://scholarship.law.upenn.edu/faculty_scholarship



Part of the [Antitrust and Trade Regulation Commons](#), [Intellectual Property Law Commons](#), [Property Law and Real Estate Commons](#), and the [Public Law and Legal Theory Commons](#)

Repository Citation

Hovenkamp, Herbert J., "Patents, Property, and Competition Policy" (2009). *Faculty Scholarship at Penn Law*. 1797.

https://scholarship.law.upenn.edu/faculty_scholarship/1797

This Article is brought to you for free and open access by Penn Law: Legal Scholarship Repository. It has been accepted for inclusion in Faculty Scholarship at Penn Law by an authorized administrator of Penn Law: Legal Scholarship Repository. For more information, please contact PennlawIR@law.upenn.edu.

PATENTS, PROPERTY AND COMPETITION POLICY

Herbert Hovenkamp*

Introduction

Should competition policy have a more prominent role than it currently has in helping the patent system promote innovation? In many other regulated industries the antitrust laws have a role, although often attenuated, in promoting competition. As regulation is less “complete” there is generally more room for antitrust. For example, the role of antitrust has tended to increase under deregulation.¹ While the two most recent Supreme Court decisions on the issue refused to apply the antitrust laws to agency regulated practices, both did so because the Court believed that the regulatory agencies in question were taking an active and effective role in monitoring competitive problems.²

In many ways the patent system resembles partial regulation. First, the patent application process involves a petition to a government agency followed by a largely *ex parte* procedure in which the agency and the applicant negotiate the issuance of a patent. Unlike many other regulatory regimes, there is no automatic period of public comment or objection by third parties.³ In any event, once a patent issues the process of agency regulation largely comes to an end for that particular patent. Nearly all subsequent government supervision comes from the courts through privately initiated lawsuits. To be sure, judicial inquiries during this period may relate back to the regulatory process – for example, a *Walker Process* antitrust claim may require reconsideration of the circumstances under which a patent was obtained, but this task generally befalls the court or

* Ben V. & Dorothy Willie Professor of Law, Univ. of Iowa.

¹ See 1A PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW ¶241 (3d ed. 2006).

² *Verizon Communications Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 US 398, 413 (2004) (agency was “an effective steward of the antitrust function”); *Credit Suisse Securities (USA) LLC v. Billings*, 551 U.S. 264 (2007) (regulation less necessary where agency is actively enforcing practices with competition goals in mind; in this particular case “any enforcement-related need for an antitrust lawsuit is unusually small”).

³ Proposed regulatory changes or rule making in the PTO requires a period of public comment, but not individual decisions whether to approve or delay a patent application. See *Tafas v. Dudas*, 511 F.Supp.2d 652 (E.D.Va. 2007) (rules promulgated by PTO outside the notice and comment rulemaking process violate the APA), rev'd on this issue, *Tafas v. Doll*, ___ F.3d ___, 2009 WL 723353 (Fed. Cir. March 20, 2009). See also Mark Leley, Doug Lichtman and Bhaven Sampat, *What to Do about Bad Patents?*, 2005 Regulation 10 (2005-2006) (proposing post-grant review system initiated by competitors). Accord MICHAEL A. CARRIER, INNOVATION FOR THE 21ST CENTURY: HARVESSING THE POWER OF INTELLECTUAL PROPERTY AND ANTITRUST LAW 205-230 (2009).

perhaps the Federal Trade Commission or International Trade Commission, rather than the PTO itself.⁴

The decision to regulate generally involves the identification of markets where simple assignment of property rights is not sufficient to produce satisfactory competitive results, usually because some type of market failure obtains.⁵ By contrast, if property rights are well defined at the time they are initially created and can subsequently be traded to some reasonably competitive equilibrium, then regulation is thought not to be necessary. In such cases the antitrust laws have a significant role to play in ensuring that the market can be as competitive as free trading allows.

One problem with the patent system is that it has *neither* significant ongoing regulation nor a clear and effective initial assignment of property rights that serves to make the market perform competitively. One could attempt to correct this system either by defining the initial assignment of property rights more clearly or else by imposing more elaborate regulation that continued through the period subsequent to patent issuance and perhaps even for the remainder of a patent's enforcement life. Most of the proposals for reform would prefer the former course of action.

Historically the antitrust laws treated patents as a species of monopoly. Judges spoke of the "monopoly patent grant," and were strongly suspicious of exclusive or collusive practices that they viewed as unauthorized attempts to expand patent rights. They described these practices in terms such as "leveraging the patent monopoly," or as an "unwarranted extension" of the patentee's "monopoly."⁶ Since monopoly implies the need for regulation and no

⁴ *Walker Process Equipment, Inc. v. Food Machinery & Chemical Corp.*, 382 US 172 (1965). See discussion, *infra*, text at notes _____. *Walker Process* involved a claim that the patentee attempted to monopolize a market by filing baseless infringement actions on fraudulently obtained patents, or where it knew there was no infringement. Such claims typically involve investigations into the circumstances under which a patent was obtained, including the truthfulness of statements made in the application.

⁵ See 1A PHILLIP E. AREEDA & HERBERT HOVENKAMP, *ANTITRUST LAW* ¶¶240-241 (3d ed. 2007); ALFRED E. KAHN, *THE ECONOMICS OF REGULATION: PRINCIPLES AND INSTITUTIONS* (PREFACE, i-xxxiv, ch. 1-19 (reprint ed., 1988)).

⁶ E.g., see *Brulotte v. Thys Co.*, 379 US 29, 33 (1964) ("to use that leverage to project those royalty payments beyond the life of the patent is analogous to an effort to enlarge the monopoly of the patent by tying the sale or use of the patented article to the purchase or use of unpatented ones"); *U.S. v. Glaxo Group Ltd.*, 410 U.S. 52,60-61 (1973) (condemning the use of a patent for "economic leverage with which to insist upon and enforce the bulk-sales restrictions imposed on the licensees"); *Zenith Radio Corp. v. Hazeltine Research, Inc.*, 395 U.S. 100 (1969) (condemning the use of patent pools that

agency was at hand, the courts took up the task under a variety of rubrics, including the first sale doctrine,⁷ “misuse” doctrine,⁸ and antitrust policy. The relation of patents to presumed monopoly led to such antitrust doctrines as the presumption that a patent confers market power for the purposes of the antitrust law of tying arrangements,⁹ or that tying of ordinary commodities such as salt to a patented durable good is somehow monopolistic,¹⁰ or the notion that agreements that extend royalty-like payments beyond the patent’s expiration improperly enlarge the patent monopoly.¹¹ While doctrines such as the market power presumption might be thought of as fairly narrow, because it extended only to tying arrangements, it was in fact quite broad because so many post-issuance patent practices can be characterized as “tying” of the patent, not merely to commodities, but also to other IP rights.¹² For example, until the

only allow bulk license agreements in an attempt to exclude competitors from the market); *Morton Salt Co. v. G.S. Suppiger Co.*, 314 U.S. 488, 491 (1942) (condemning “use of...patent monopoly to restrain competition in the marketing of unpatented articles, salt tablets, for use with the patented machines...aiding in the creation of a limited monopoly in the tablets not within that granted by the patent”). Cf. *Consolidated Electric Light Co. v. McKeesport Light Co.*, 159 U.S. 465, 476 (1895) (overly broad claim on lightbulb filament amounted to “unwarranted extension of his [the patentee’s] monopoly”).

⁷See Christina Bohannon and Herbert Hovenkamp, *The Evolution of IP/Competition Policy: the First Sale Rule and Vertical Restraints* (2009, unpublished manuscript on file with authors).

⁸ See HERBERT HOVENKAMP, MARK D. JANIS, AND MARK A. LEMLEY, IP AND ANTITRUST: AN ANALYSIS OF ANTITRUST PRINCIPLES APPLIED TO INTELLECTUAL PROPERTY LAW, CH. 3 (2009); 10 PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW ¶1781 (2D ED. 2004); THOMAS F. COTTER, MISUSE, 44 HOUS.L.REV. 1 (2007); CHRISTINA BOHANNAN, MISUSE AND FORECLOSURE (2009, UNPUBLISHED MANUSCRIPT ON FILE WITH AUTHOR).

⁹ E.g., *International Salt Co. v. US*, 332 US 392 (1947); overruled by *Illinois Tool Works, Inc. v. Independent Ink, Inc.*, 547 US 28 (2006).

¹⁰ *International Salt, id.*.

¹¹ *Brulotte v. Thys Co.*, 379 US 29, 33 (1964) (contract that required royalty payments past patent expiration date per se unlawful patent misuse). See also *Zila, Inc. v. Tinnell*, 501 F. 3d 1010, 1026 (9th Cir. 2007) (*Brulotte* applies to “a projection of patent monopoly after the patent expires”); *Scheiber v. Dolby Laboratories, Inc.*, 293 F. 3d 1014 (7th Cir. 2002) (reluctantly applying *Brulotte*).

¹² Indeed, even the *Brulotte* decision condemning post-expiration royalties used a tying analogy, proclaiming that the practice tied the royalties available during the patent period to the contractually created post-expiration royalties. See *Brulotte v. Thys Co.*, 379 US 29, 33 (1964) (“to use that leverage to project those royalty payments beyond

presumption was overruled in the *Illinois Tool Works* decision in 2006¹³ it was applied to block booking of motion pictures¹⁴ as well as package licensing.¹⁵

In roughly the last quarter century, however, antitrust has done an about face. It now regards patents as a form of property, which means that they confer the power to exclude, as all property does, but they only rarely create significant market power in the economic sense.¹⁶ One aspect of this paradigm shift in rhetoric from monopoly to property is that there is considerably less room for antitrust challenges to patent practices today than there was thirty and more years ago. While competition policy is thought to have a great deal to say about monopoly, it is seldom concerned with problems pertaining to property rights as such, and almost never to simple claims about the scope of property rights. This is doubly true in the case of patents because they are a creature of federal law. Antitrust generally has no business interfering in the legal regime created by another body of federal rules, even if those engaged in formulating competition policy believe that regime is deficient.

This shift in conception has had a dramatic influence on the application of antitrust to patent practices. Perhaps most symbolic, it finally led in 2006 to the Supreme Court's rejection of the sixty-year-old antitrust presumption that a patent conferred market power on its owner when the patentee was guilty of tying or related offenses – most typically, of requiring licensees of a patented good to take one or more unpatented consumable goods as well.¹⁷ But the shrinking

the life of the patent is analogous to an effort to enlarge the monopoly of the patent by tying the sale or use of the patented article to the purchase or use of unpatented ones”). See also *United States v. Microsoft*, 253 F. 3d 34, 66 (D.C. Cir. 2001) (holding that “Microsoft’s exclusion of IE from the Add/Remove Programs utility and its commingling of browser and operating system code constitute exclusionary conduct, in violation of §2”).

¹³ *Illinois Tool Works, Inc. v. Independent Ink, Inc.*, 547 US 28 (2006).

¹⁴ *United States v. Loew’s, Inc.*, 371 U.S. 38 (1962); *United States v. Paramount Pictures*, 334 U.S. 131 (1948); *MCA Television Ltd. v. Public Interest Corp.*, 171 F.3d 1265 (11th Cir. 1999).

¹⁵ See *McCullough Tool Co. v. Well Surveys, Inc.*, 343 F.2d 381, 408 (10th Cir. 1965) (dicta); *American Securit Co. v. Shatterproof Glass Corp.*, 154 F.Supp. 890 (D.C.Del. 1957) (package licensing of patents constitutes misuse).

¹⁶ Market power is the power to earn a profit by reducing output and letting the price rise to a level above cost. See HERBERT HOVENKAMP, *FEDERAL ANTITRUST POLICY: THE LAW OF COMPETITION AND ITS PRACTICE* §§3.1-3.2 (3d ed. 2005).

¹⁷ *International Salt Co. v. US*, 332 US 392 (1947) (patentee required users of

domain of antitrust in the area of patents went much broader. In the 1970's the Antitrust Division of the Justice Department had promulgated a list of "nine no-no's," or patent practices that it would presume to be automatic antitrust violations.¹⁸ The list included practices such as tying of unpatented goods to a patented tying product, grantbacks, exclusive dealing, package licensing, and resale price maintenance. Today, virtually none of the nine no no's remains a clear antitrust violation, and many would appear to be legal per se.

But our revised conception of patents as property rather than monopoly remains incomplete in significant ways. While "property" is rhetorically much less threatening than "monopoly," that is so because traditional property rights come with built in limitations that serve to discipline the power to exclude -- namely,

patented salt injection machine to purchase its salt tablets for use in the machine); *overruled by Illinois Tool Works, Inc. v. Independent Ink, Inc.*, 547 US 28 (2006) (seller of patented printhead required users to purchase its unpatented ink).

¹⁸ The "Nine No-Nos" were:

- (1) tying the purchase of unpatented materials as a condition of the license,
- (2) requiring the licensee to assign back subsequent patents,
- (3) restricting the right of the purchaser of the product in the resale of the product,
- (4) restricting the licensee's ability to deal in products outside the scope of the patent,
- (5) a licensor's agreement not to grant further licenses,
- (6) mandatory package licenses,
- (7) royalty provisions not reasonably related to the licensee's sales,
- (8) restrictions on a licensee's use of a product made by a patented process, and,
- (9) minimum resale price provisions for the licensed products.

Bruce B. Wilson, Deputy Assistant Attorney Gen., Remarks before the Fourth New England Antitrust Conference, Patent and Know-How License Agreements: Field of Use, Territorial, Price and Quantity Restrictions (Nov. 6, 1970). See Richard Gilbert and Carl Shapiro, Antitrust Issues in the Licensing of Intellectual Property: The Nine No-No's Meet the Nineties, available at <http://faculty.haas.berkeley.edu/shapiro/ninenono.pdf>. See also, Herbert Hovenkamp, *The Intellectual Property-Antitrust Interface*, COMPETITION LAW AND POLICY 1979 (ABA Section of Antitrust Law 2008), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1287628. Practice number 3 – post-sale restraints – might still be unenforceable under the first sale doctrine. See *Quanta Computer, Inc. v. LG Electronics, Inc.*, 128 S. Ct. 2109 (2008). But such restraints are not generally antitrust violations. See Christina Bohannon and Herbert Hovenkamp, *The Evolution of IP/Competition Policy: the First Sale Rule and Vertical Restraints* (2009, unpublished manuscript on file with authors); Christina Bohannon, *Copyright Preemption of Contracts*, 67 Maryland L.Rev. 611 (2008).

boundaries and priority rules that define the extent of ownership and give notice to non-owners. Patent law has become “property” without either. Indeed, many of the opportunities for anticompetitive behavior in the area of patents can be traced back to the twin problems that boundaries are not clear and priority, and thus ownership, is so difficult to determine.

In their important book on *Patent Failure*, James Bessen and Michael Meurer also treat patents as property. But they rightfully insist on more follow through than the law has exhibited in the past.¹⁹ If it deserves to be treated as property, they believe, then it should be governed by a set of administrable, relatively clear rules such as those that govern other property rights.²⁰

The problem that Bessen and Meurer raise is troubling for competition policy. Antitrust has gone from one unsatisfactory regime to another. In the first, it uncritically accepted the notion that patents are a species of monopoly without any of the usual inquiries into the relation between the patent and the power to charge monopoly prices or to exclude from a property defined market. In the second it has adopted a notion of patents as property without any of the discipline accorded by rules governing boundaries and priorities that are almost universal characteristics of property systems. Without clear limitations the ironic result is that patents often do behave more like monopoly than like property. This is clearly the case, for example, in some of the reverse payment settlement agreements that courts have upheld notwithstanding clear collusion,²¹ and also some instances of patent holdup that arise in the standard setting context.²²

Competition Policy and Patent Property: Boundaries and Priorities

Treating patents as property for purposes of competition policy is not merely a good idea. It is essential to understanding the role of patents in a competitive economy based on private enterprise. Patents are productive and transferable assets. Just as property rights generally, patents give their owner something very close to exclusive control over the bundle of attributes covered

¹⁹ JAMES BESSEN AND MICHAEL J. MEURER, *PATENT FAILURE: HOW JUDGES, BUREAUCRATS, AND LAWYERS PUT INNOVATORS AT RISK* (2008). See also F. Russell Denton, *Plumb Lines instead of a Wrecking Ball: A Model for Recalibrating Patent Scope*, 16 J.INTEL.PROP.L. 1 (Fall 2008).

²⁰ *Id.* at 46-94.

²¹ See discussion *infra*, text at notes ____.

²² See discussion *infra*, text at notes ____.

by the right. And like most property rights, while they entail a power to exclude they rarely confer economic market power in and of themselves.²³ In order to function as property they have to be made exchangeable and divisible. At the same time, while property rights themselves are hardly anticompetitive and are essential to the creation of any economy, they can be used anticompetitively. For example, they can be the subject of price-fixing, unlawful mergers, or in some cases exclusionary practices. To the extent they involve substantial and irreversible commitments they can also create entry barriers or lock people in to pre-existing commitments.²⁴ But except for a few details these rules are the same for all property rights, including rights in intellectual property.²⁵

Insofar as competition policy is concerned, some of the biggest shortcomings of the patent system relate to its status as a system of property rights. The problems relate to two very general subjects that are well known to property lawyers: boundaries and priority. Both are essential to an enforceable, useful system of rights. Indeed, the development of the common law was heavily preoccupied with the establishment of clear boundaries and priorities, and the result was an elaborate system of rules that generally gives the property owner a great deal of confidence.²⁶ Having done a title search, which provides information about priorities and legal boundaries, and a survey to establish physical boundaries, a developer can put up a building with a high degree of confidence that he is not infringing on someone else's land. By contrast, much of patent/antitrust doctrine arises from the fact that these ordinary and essential property limitations are so poorly defined within the patent system.

Inadequate doctrine of patent boundaries explains the difficulties that antitrust has in addressing two types of antitrust issues. One is the variations on the *Walker Process* doctrine, which concerns the bringing of improper patent infringement suits. The other concerns the high degree of judicial deference that is accorded to patent settlements, even if obviously anticompetitive. Inadequate

²³ See 2B PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW ¶1518 (3d ed. 2007).

²⁴ See Thomas F. Cotter, Patent holdup, Patent Remedies, and Antitrust Responses, ___ J.Corp.L. ___ (2009) (forthcoming)

²⁵ One exception is the often-criticized *General Electric* rule, making horizontal price fixing in patent licensing agreements lawful. *United States v. General Electric Co.*, 272 US 476 (1926).

²⁶ See, e.g., MILTON R. FRIEDMAN, FRIEDMAN ON CONTRACTS AND CONVEYANCES OF REAL PROPERTY (6th ed. 2002); RICHARD POWELL, REAL PROPERTY (6 vols., 1949-1958, plus current supps).

doctrine in the area of priorities accounts for much of the antitrust problem of patent holdup, or the assertion after the fact of patent rights that put developers to the choice of paying exorbitant royalties or else abandoning technology to which they have already made a significant investment.

Walker Process and the Boundary Problem

In *Walker Process* the Supreme Court held that someone who obtained a patent by “fraud” and subsequently filed an infringement suit could violate the antitrust laws if the lawsuit tended to strengthen or prolong the firm’s dominant position in some market, or to create market power.²⁷ Today most *Walker Process* claims arise as counterclaims to patent infringement suits.²⁸ As a result, the Federal Circuit hears most of the appeals,²⁹ and the Supreme Court has not returned to the issue except for a 1993 decision involving an allegedly improper copyright infringement suit.³⁰ The Federal Circuit has made *Walker Process* claims very difficult to sustain, perhaps because they are asserted so frequently. Most recently, in its *Dippin’ Dots* decision, the Federal Circuit held that a patentee who had himself made some 500 sales of a patented product in violation of the on sale bar,³¹ and whose patent was therefore invalid, did not

²⁷ *Walker Process Equipment, Inc. v. Food Mach. & Chem. Corp.*, 382 U.S. 172 (1965).; see 3 PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW ¶706 (3d ed. 2008); HERBERT HOVENKAMP, MARK D. JANIS, AND MARK A. LEMLEY, IP AND ANTITRUST: AN ANALYSIS OF ANTITRUST PRINCIPLES APPLIED TO INTELLECTUAL PROPERTY LAW §11.2 (2009). In addition to exclusionary conduct, the antitrust plaintiff, or infringement suit counterclaimant, must also show market power and make out any other elements of an antitrust violation. See 1 PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW ¶208 (3d ed. 2006).

²⁸3 AREEDA & HOVENKAMP, ANTITRUST LAW, note ___, ¶706.

²⁹ This Federal Circuit monopoly on patent cases is thought by many to be part of the patent problem – that is, there is no competition among the circuits to purge out errors. See Craig Allen Nard & John F. Duffy, *Rethinking Patent Law’s Uniformity Principles*, 101 NW.UNIV.L.REV. 1619 (2007); Cecil D. Quillen, Jr., *Commentary on Bessen and Meurer’s Patent Failure: an Industry Perspective*, 16 J.INTELL.PROP.L. 57 (2008). See also Cecil D. Quillen, *Innovation and the U.S. Patent System*, 1 VA.L.&BUS.REV. 207, 210-225 (2006) (on effects of consolidation of appeals into the Federal Circuit).

³⁰ See *Prof’l Real Estate Investors, Inc. v. Columbia Pictures Indus., Inc.*, 508 U.S. 49 (1993) (“PRE”); see 1 PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW ¶205b (3d ed. 2006); 3 *id.* ¶706.

³¹ 35 U.S.C. §102b.

violate the antitrust laws by maintaining an infringement action.³² The court concluded that the patentee had submitted his application without any explanation of a “knowing failure to disclose sales that bear all the earmarks of commercialization,” and that this supported an inference of intent to mislead the PTO.³³

However, this evidence of fraud was insufficient in the eyes of the Federal Circuit to warrant antitrust condemnation, which required a stronger showing of both intent and materiality.³⁴ On these facts, this translated into a requirement of “evidence of intent separable from the simple fact of the omission.”³⁵ The court held:

It might be argued that because the omitted reference was so important to patentability, DDI [the patentee] must have known of its importance and must have made a conscious decision not to disclose it. That argument has some force, but to take it too far would be to allow the high materiality of the omission to be balanced against a lesser showing of deceptive intent by the patentee. Weighing intent and materiality together is appropriate when assessing whether the patentee's prosecution conduct was inequitable. However, when *Walker Process* claimants wield that conduct as a "sword" to obtain antitrust damages rather than as a mere "shield" against enforcement of the patent, they must prove deceptive intent independently.³⁶

³² *Dippin' Dots, Inc. v. Mosey*, 476 F.3d 1337, 1347 (Fed. Cir. 2007), cert. denied, 128 S.Ct. 375 (2007).

³³ *Dippin' Dots*, 476 F.3d at 1346. The court also noted that “The concealment of sales information can be particularly egregious because, unlike the applicant's failure to disclose, for example, a material patent reference, the examiner has no way of securing the information on his own.” The same thing could be said of the alleged infringer.

³⁴ “Materiality” refers to the likelihood that the patent would have been rejected had the true facts been known. See 3 ANTITRUST LAW, note __, at ¶705.

³⁵ *Dippin' Dots*, 476 F.3d at 1347. *Walker Process* itself spoke of the fraud as all that was required, saying nothing of evidence of intent separate from the false sworn statement itself.

³⁶ *Id.*, 476 F.3d at 1348 (internal citations omitted). The court added:

While *Walker Process* intent may be inferred from the facts and circumstances of a case, “[a] mere failure to cite a reference to the PTO will not suffice.” This is not to say that an omission always reduces to “mere failure to cite.” We acknowledged in *Nobelpharma* “that omissions, as well as misrepresentations, may in limited circumstances support a finding of *Walker*

In this case the sales that violated the on sale bar had occurred in 1987, and the eventual patent infringement suit was filed in 2000, thirteen years later.³⁷ Further, the improper conduct was not limited to the misrepresentation to the PTO about prior sales; it also consisted in the subsequent filing of a patent infringement lawsuit, presumably designed to exclude the infringement defendant in the hopes that the disqualifying sales would not be discovered. Certainly one who files a patent infringement suit with present knowledge that the patent is unenforceable has met §2's conduct requirement, particularly in an area where the information that would be necessary to defeat patentability was not in the hands of the PTO itself or, presumably, the public. The decision seems to be at odds with *Walker Process* itself, which also involved a patent obtained upon a false affidavit about the lack of prior sales.³⁸

Further, while the Federal Circuit required something more than a sufficient misrepresentation to warrant a conclusion of inequitable conduct, it overlooked the fact that it had something more. Not only had the patentee misrepresented its sales history to the PTO during the application process, but it also filed an infringement action a decade later after the sales evidence was stale.

It is one thing to file a patent infringement suit on a patent that is reasonably subject to dispute on the basis of public information – for example, where there is a legal dispute about subject matter³⁹ or claim construction.⁴⁰

Process fraud ... because a fraudulent omission can be just as reprehensible as a fraudulent misrepresentation." We believe, though, that to find a prosecution omission fraudulent there must be evidence of intent separable from the simple fact of the omission.
(citing and quoting *Nobelpharma AB v. Implant Innovations, Inc.*, 141 F.3d 1059, 1070-1071, cert. denied 525 US 876 (1998)).

³⁷ See *In re Dippin' Dots Patent Litigation*, 249 F.Supp.2d 1346 (N.D.Ga.,2003) (docket entry).

³⁸ See *Walker Process*, 382 U.S. at 174 ("Food Machinery had sworn before the Patent Office that it neither knew nor believed that its invention had been in public use in the United States for more than one year prior to filing its patent application when, in fact, Food Machinery was a party to prior use within such time.").

³⁹ E.g., *In re Bilski*, 545 F.3d 943 (Fed. Cir. 2008).

⁴⁰ E.g., *Kinetic Concepts, Inc. v. Blue Sky Medical Group, Inc.*, ___ F.3d ___, 2009 WL ____ (Fed. Cir. Feb. 2, 2009).

Both the patentee and the infringer has the same access to relevant information – so this amounts to a “title dispute” over the meaning of the public record.⁴¹ But fraudulent failure to disclose prior sales is something that one cannot reasonably expect to show up in the record, and sales made by the patentee itself thirteen years earlier might very well not ever show up at all. In that case the patentee was attempting to exclude others from a line of commerce that rightfully belonged to the public. Perhaps we are less concerned in a case such as *Dippin’ Dots* because we doubt that a relevant economic market exists for a particular ice cream product, but that is a completely different issue. The patent in question could just as easily have covered a market shifting innovation and created a real economic monopoly for something that should have been offered to the public under competition.

Uncertain Boundaries and Patent Lawsuit Settlements

The United States courts strongly favor settlement of patent infringement suits and rarely second guess them, even if they involve practices that are prima facie anticompetitive, such as price fixing or, more frequently, market division.⁴² Further, as a general matter a court entertaining an antitrust challenge to a settlement agreement will refuse to inquire into the merits of the underlying IP infringement dispute.⁴³ That is, the court will not generally ask such questions as whether the patent was valid and enforceable, or whether the infringement defendant’s technology or product actually infringed the patent. The basic logic of this approach is clear enough: given the ambiguity of outcome that occurs in so many infringement suits, the whole purpose of the settlement is to avoid determining questions of validity, scope, and infringement, difficult areas where reasonable minds can differ about the income. For an antitrust challenger to ask a court to look into the merits would undermine the purpose of settlement altogether, which is to provide closure of the issue and avoid a judicial determination that is highly likely to be unsatisfactory.

This view has been carried to its extreme in several recent cases involving so-called “reverse payment” settlements in the pharmaceutical industry, in which the market dominating maker of a pioneer drug pays a generic producer large sums of money in exchange for the generic’s commitment to stay out of the

⁴¹ Cf. *See Prof'l Real Estate Investors, Inc. v. Columbia Pictures Indus., Inc.*, 508 U.S. 49 (1993) (“PRE”), where the dispute was over a question of law, namely, whether showing a videotape of a commercial movie in an hotel room constituted a public “performance.”

⁴² See 12 HERBERT HOVENKAMP, ANTITRUST LAW ¶2046 (2d ed. 2005).

⁴³ *Ibid.*

market for a specified period.⁴⁴ In the cases approving such settlements the courts generally refuse to inquire into the merits of the patent infringement dispute.⁴⁵

We cannot say that the antitrust decisions refusing to investigate the merits of the infringement suit are incorrect. But the point is that the indeterminacy in the patent system creates the intolerable situation that the courts have to defer to agreements that would constitute per se antitrust violations and even criminal offenses outside the patent context, simply because the question of infringement is so difficult to determine. In the eyes of these courts, the prospect of having to determine the proper boundary lines of a patent are so daunting that they are sufficient to justify a naked cartel that the parties have a very strong incentive to negotiate. That is, if the patent is invalid the generic can enter the market in competition with the patentee and soon after with others, producing something close to the competitive return. The settlement entitles the two firms to share the market's monopoly profits. Thus the settlement injures consumers while giving the parties any cartel benefits that might accrue from sharing the returns of a monopolized product.

Priorities, Standard Setting and Holdup

Several patent holdup cases involve abuses of the patent continuation process. Many patent applications are rejected upon initial submission, but they are rarely rejected with absolute finality. Further, subsequent to filing its original application a patent applicant might wish to write an application with broader or somewhat different claims, or perhaps add claims that were not made in the original application. Or it may wish to rewrite claims that had been rejected in the original application. A patent "continuation" is an application for revised or additional claims made on a patent that was previously applied for.⁴⁶

⁴⁴ See *In re Ciprofloxacin Hydrochloride Antitrust Litigation*, 544 F.3d 1323, (Fed.Cir. 2008); *In re Cardizem CD Antitrust Litigation*, 332 F. 3d 896 (6th Cir. 2003); *Schering-Plough Corporation v. FTC*, 402 F. 3d 1056 (11th Cir. 2005); *Valley Drug Co. v. Geneva Pharmaceuticals, Inc.*, 344 F.3d 1294 (11th Cir. 2003). See also C. Scott Hemphill, *Paying for Delay: Pharmaceutical Patent Settlement as a Regulatory Design Problem*, 81 N.Y.U. L. REV. 1553 (Nov. 2006); Herbert Hovenkamp, Mark D. Janis and Mark A. Lemley, *Anticompetitive Settlements of Intellectual Property Disputes*, 87 Minn. L. Rev. 1719 (2003).

⁴⁵E.g., *Ciprofloxacin*, supra, 544 F. 3d at 1333 ("there is a long standing policy in the law in favor of settlements, and this policy extends to patent infringement litigation").

⁴⁶ The Patent Act provides for continuations in 35 U.S.C. §132. On possible abuses, see Mark A. Lemley and Kimberly A. Moore, *Ending Abuse of Patent Continuations*, 84 BOSTON UNIV. L.REV. 63 (2004). See also James W. Beard, *Weeds in the docket: Tafas v. Dudas, Patent Continuation Reforms, and their Impact on patent Applications in the Biotechnology Industry*, 9 J.PATENT & TRADEMARK OFC. SOC'Y 423 (2008); Harold C.

A "divisional" application is a particular type of patent continuation in which the original patent application lacked "unity."⁴⁷ "Unity of invention" is said to be a prerequisite for patenting because a patent may relate to only one invention, or perhaps to a group of closely related inventions. When a patent is rejected for lack of unity the patentee may then file a "divisional" application for spin-off of second, third, or subsequent inventions.⁴⁸ The PTO may reject a patent altogether for lack of unity, or it may grant a patent on one invention while leaving the patentee free to file later divisional applications for other inventions that were arguably covered in the original application.

Under generally accepted patent practices in the United States, when a subsequent continuation or divisional application is granted the subsequent patent "relates back" to the date of the original patent application, and will typically retain the original application's priority over rival filings. This relation back creates the priority problem that can lead to patent abuse and has been the subject of some reform efforts within the PTO itself.⁴⁹ The continuation process makes it possible for a patentee to write updated claims designed to exclude a rival's invention that has been placed on the market subsequent to the date of the original application. For example, a patent applicant might file a patent application in 2000. In 2001 someone else might place a new invention on the market. The 2000 applicant might then file a continuation or divisional

Wegner, *Abolishing Continuation: A Four Part Program to Improve the Patent Process*, GEORGE WASHINGTON U. LAW SCHOOL (April 2, 2008). And see Samson Vermont, *Taming the Doctrine of Equivalents in Light of "Patent Failure,"* p. 3 n. 6 (George Mason Law and Economics Research Paper, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1255743) ("Applicants use continuations to sit and wait to see what competitors do. Applicants then amend the pending claims accordingly. The notice costs generated by continuations appear to be high enough to justify restricting if not eliminating them altogether.").

⁴⁷ On divisional applications, see 35 U.S.C. §121.

⁴⁸ In such cases the original application is called the "parent." Typically the patentee will claim one invention off the parent application, and then begin a process of filing additional "divisional" applications for other inventions covered by the patent. When these later divisional applications are granted the priority date of those patents ordinarily relates back to the date of the parent. Further, the claims language in the subsequent divisional applications need not be identical with that in the parent and can cover technology that was not actually contemplated in the parent.

⁴⁹ See *Tafas v. Dudas*, 511 F. Supp. 2d 652, 656 (E.D. Va. 2007) (PTO's efforts exceeded its rule making power), rev'd on other grounds, *Tafas v. Doll*, ___ F.3d ___, 2009 WL 723353 (Fed. Cir. March 20, 2009). The Federal Circuit approved the district court's refusal to approve the PTO's limitations on continuations, finding them to be inconsistent with the statutory mandate that the enforcement date of approved patents relates back to the application date.

application with new or revised claims expressly designed to cover the 2001 invention and claim priority over it, even though the 2001 inventor had no reasonable way of knowing that its invention was subject to an "earlier" patent. If a divisional patent is later granted in, say, 2002, its priority date will relate back to the 2000 patent.⁵⁰ The harmfulness of this process is exacerbated by the fact that the publication requirements for pending patent applications in the United States are very weak, requiring publication only 18 months after filing, and even then only if the application is not subject to foreign filing as well.⁵¹ Even if the application is published a rival cannot know with certainty what its claims will be until final approval.

The possibility of such abuses reveals one of the more deficient aspects of the patent system's failure to provide adequate notice to inventors.⁵² While

⁵⁰Lemley and Moore cite these cases as examples, with these parentheticals:

[In] *Chiron Corp. v. Genentech, Inc.*, 268 F. Supp. 2d 1148 (E.D. Cal. 2002), the plaintiff filed a patent application covering monoclonal antibodies in 1984, a time when the technology was in its infancy. It kept various applications pending in the PTO until 1999, when it drafted new claims designed to cover not just monoclonal antibodies as they were understood in 1984, but new types of antibodies developed in the intervening 15 years, including those invented by the defendant. *Id.* at 1151-52. Another example is *Gentry Gallery, Inc. v. Berklime Corp.*, 134 F.3d 1473 (Fed. Cir. 1998). The patentee there amended his claims to a reclining chair to claim placing the controls for that chair in a position he never thought of, but saw for the first time on his competitor's product. *Id.* at 1479 ("Sproule admitted at trial that he did not consider placing the controls outside the console until he became aware that some of Gentry's competitors were so locating the recliner controls.").

See Lemley and Moore, *Ending Abuse*, note ___, 84 BOSTON UNIV.L.REV. at 76-77. See also Steve Blount, *The Use of Delaying Tactics to Obtain Submarine Patents and Amend Around a Patent that A Competitor Has Designed Around*, 81 J. PAT. & TRADEMARK OFF. SOC'Y 11 (1999).

⁵¹See 35 U.S.C. §122(b).

⁵²See 3 PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW ¶704a,b (3d ed. 2008). See JAMES BESSEN AND MICHAEL J. MEURER, PATENT FAILURE: HOW JUDGES, BUREAUCRATS, AND LAWYERS PUT INNOVATORS AT RISK 62-65 (2008), noting, inter alia, that the number of continuing applications had increased seven-fold in the previous twenty years. Further,

Applicants can change claim language in patents without updating the published applications. The final claim language is published only after the patent is issued, and the gap between application date and issuance is growing. Moreover, publication does little to prevent patent applicants from introducing unanticipated new claims via continuing applications.

patents may be a species of property, they are property with a woefully inadequate system for recording titles and making them public prior to someone else's investment decision. To the extent a patentee can manipulate the continuation or divisional process to write patent claims on the existing inventions of other inventors who did not have adequate prior notice of them, the policy reduces rather than increases the incentive to innovate. An inventor might do a thorough patent search and not find any prior claim on his invention, but later be made the subject of an infringement suit on the basis of a continuing or divisional application that was filed later but that earns the priority of the original patent application.

Nevertheless, there is probably little room for application of the antitrust laws, given that the Federal Circuit has expressly approved the use of continuation and divisional applications to write updated claims on a competitor's existing products or technology.⁵³ The notice and publication provisions are part of the law as well.

While we believe such an approach to the giving of notice deters rather than promotes innovation, the fact is that conduct approved by law cannot form

Id. at 63.

⁵³See *Kingsdown Medical Consultants v. Hollister*, 863 F.2d 867, 874 (Fed. Cir. 1988):

[T]here is nothing improper, illegal or inequitable in filing a patent application for the purpose of obtaining a right to exclude a known competitor's product from the market; nor is it in any manner improper to amend or insert claims intended to cover a competitor's product the applicant's attorney has learned about during the prosecution of a patent application. Any such amendment or insertion must comply with all statutes and regulations, of course, but, if it does, its genesis in the marketplace is simply irrelevant and cannot of itself evidence deceitful intent. To be sure, applicants do not simply have *carte blanche* to rewrite their claims. The new claims must find adequate support in the original application. If not, the patent will be invalid for lack of enablement or written description, or alternatively, the new claims will be considered "new matter" invented only as of the date the claims were added. If the patentee can find some support in the original patent application for the current claims, however, she can obtain legal rights over ideas that (at least in that form) never occurred to her until she saw what others were already doing.

Accord State Indus., Inc. v. A.O. Smith Corp., 751 F.2d 1226, 1235 (Fed. Cir. 1985). See Lemley, note ____, 84 BOSTON UNIV. L.REV. at 77-78.

the basis of an antitrust claim when the patentee later files an infringement action based on such an after-acquired right. The antitrust laws, which are very generally, do not provide the courts with a mandate to fix broken regulatory regimes.

Competition Policy under Clear Property Rights

While patents are property, the three types of disputes discussed above can have severe implications for competition. Further, they rarely arise in property regimes where boundaries and priorities are better behaved. Indeed, one of the ironies is that antitrust is effectively ousted from these disputes precisely *because* patent boundaries and priorities perform so poorly.

For example, *Walker Process* violations are very difficult to prove because it is so very difficult for a court to conclude that an infringement action was brought in bad faith, given the great difficulty in determining both the validity of patents and the fact of infringement. To place the dispute in the context of real property. Suppose that I file a trespass action against you without having clear title to my own property, or where it is highly unlikely that you are trespassing because the boundary is not where I say it is. While such a lawsuit would not often provoke an antitrust counterclaim, it certainly could result in a claim of malicious prosecution, and a court would have little difficulty assessing the merits.⁵⁴

Likewise, the real property analogue to settlements is something like this: suppose I own a grocery store and you acquire an adjacent parcel and begin building a competing store. I then file a trespass claim against you, alleging that you are building on my property. We settle our litigation by an agreement under which I pay you \$1000 a month and you agree that during the pendency of the payments you will not operate a competing store on the disputed property.

If a consumer group seeking lower grocery prices challenged this settlement as a market division agreement, no court would hesitate to consider evidence of a title search showing that I never owned the property in question.

⁵⁴ See *Williams v. Town of Greenburgh*, 535 F.3d 71 (2nd Cir. 2008) (town officials did not violate employee's right to be free of malicious prosecution, even though employee was subsequently acquitted of trespass); *Kee v. Ahlm*, 219 Fed. Appx. 727 (10th Cir. 2007) (police officer held not liable to bar patron for malicious prosecution where officer had probable cause to arrest for criminal trespass); *Blankenhorn v. City of Orange*, 485 F. 3d 463 (9th Cir. 2007) (police officers who were not involved in providing false statements to prosecutor were not liable in action alleging malicious prosecution); *McElya v. Hill*, 105 Tenn. 319, 59 S.W. 1025 (1900) (whether lawsuit on claimed defect in real property title caused by pre-existing mortgage amounted to malicious prosecution presented jury question).

Further, if the court agreed that I did not own this property it would not hesitate to proclaim my trespass action a sham and the "settlement" a per se antitrust violation.

That is to say, courts often proclaim that they are loathe to inquire into the underlying merits of patent settlement agreements.⁵⁵ But contrary to what many of them state, this reluctance is not explained by the general legal policy favoring settlements. Rather, the driving force is the great difficulty attending the determination of patent validity or scope.

Finally, the holdup problem is analogous to that of the real estate developer with a piece of land for which he is unsure about the title. She would do a title search and, having found no conflict, proceed with confidence. Without that knowledge an adverse holding down the road could mean that the developer either loses the development or else is thrust into a bilateral monopoly situation in which she must bargain with the true owner for a right to which he has already made a very significant commitment. The result of this lack of clarity will be that the developer will likely follow an alternative course.⁵⁶

⁵⁵ See e.g., *Standard Oil Co. (Ind.) v. United States*, 283 U.S. 163, 170 (1931) (courts should encourage settlement of "legitimately conflicting claims"); accord *Boston Scientific Corp. v. Schneider (Eur.)* AG, 983 F.Supp. 245 (D.Mass. 1997), *app. dismiss'd*, 152 F.3d 947 (Fed.Cir. 1998) (reasonable settlement challenged by competitor as concerted refusal to deal). Cf. *Asahi Glass Co., Ltd. v. Pentech Pharmaceuticals, Inc.*, 289 F.Supp.2d 986, 991-992 (N.D.Ill. 2003) (Posner, J.):

Only if a patent settlement is a device for circumventing antitrust law is it vulnerable to an antitrust suit. Suppose a seller obtains a patent that it knows is almost certainly invalid (that is, almost certain not to survive a judicial challenge), sues its competitors, and settles the suit by licensing them to use its patent in exchange for their agreeing not to sell the patented product for less than the price specified in the license. In such a case, the patent, the suit, and the settlement would be devices--masks--for fixing prices, in violation of antitrust law.

citing 2 Hovenkamp, Janis & Lemley, *IP and Antitrust: an Analysis of Antitrust Principles Applied to Intellectual Property Law* §31.1c (2002). See also WILLIAM M. LANDES & RICHARD A. POSNER, *THE ECONOMIC STRUCTURE OF INTELLECTUAL PROPERTY LAW* 382-385 (2003). Department of Justice and FTC, *Antitrust Guidelines for the Licensing of Intellectual Property* §5.5 & Example 10 (1995), available at www.usdoj.gov/atr/public/guidelines/0558.htm. ("settlements involving the cross-licensing of intellectual property rights can be an efficient means to avoid litigation and, in general, courts favor such settlements."). See also 12 HERBERT HOVENKAMP, *ANTITRUST LAW* ¶2046 (2d ed. 2005); Mark A. Lemley, *Rational Ignorance at the Patent Office*, 95 NW. U. L. REV. 1495, 1501 (2001)(noting preference for settlement).

⁵⁶Cf. Mark A. Lemley, *Ignoring Patents*, 2008 MICH. ST. L. REV. 19 (2008) (in some markets innovators may simply eschew a search because the costs are high and reliability very low).

The social cost of such “second best” decisions is undoubtedly very high – and it is a social cost that Bessen and Meurer do not even include when they calculate the already devastating social costs of our existing patent system. It creates what might be called the “reverse Plant” phenomenon. In 1934 Arnold Plant opined that the patent system tends to divert research toward things that are capable of being patented rather than things that are not.⁵⁷ The obverse phenomenon is that developers who are unsure of what patent rights are out there will tend to invest in areas where patent rights are clear or where patents held by others are absent; or they will simply invest less. The greater the risk of unfavorable patent litigation, the less likely the investment will be made. As the proliferation of patents with uncertain scope becomes larger, this phenomenon forces more and more development decisions off their optimal course.

Who Benefits from Ambiguous or Overly Broad Patent Boundaries and Priorities?

Boundaries and priorities problems are not inherently signs of special interest capture. They may simply be evidence of a technically deficient system, or perhaps they are problems that do not have satisfactory solutions, quite apart from special interest capture. Nevertheless, it seems clear that lack of clarity in patent boundaries and priorities benefits patent owners far more than consumers, innovators, or any other group. For all these others the result is a clear detriment.

Our current system (1) gives very poor notice of patent ownership to outsiders⁵⁸; (2) does not make knowledge of infringement or copying of another’s patent right a precondition for enforcement; and (3) upon enforcement, awards damages for past as well as future acts of infringement. Such a scenario is a recipe for patentee aggrandizement at the expense of the public. It imperils innovators, who do not know if they are building on property owned by someone else, just as much as lack of a clear land title imperils real estate development.

⁵⁷ Arnold Plant, *The Economic Theory Concerning Patents for Inventions*, 1 *ECONOMICA* (n.s.) 30 (1934).

⁵⁸ Copyright has its own analogy to the boundaries problem – namely the “fair use” doctrine, whose uncertain boundaries create a clear disincentive to creative work that makes limited or transformative use of the work of others. The indeterminacy of fair use law and the high cost of fair use determinations in court have enabled copyright owners to scare much of the public away from asserting rights that constitute fair use but where individual members of the public lack the resources to litigate. See Christina Bohannon, *Copyright Harm, Foreseeability, and Fair Use*, 85 *Wash.Univ.L.Rev.* 969 (2007); Christina Bohannon, *Copyright Harm and the First Amendment* (Iowa Legal Studies Working Paper, March 24, 2009, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1367624).

At the same time, however, the system permits patent owners to profit because it greatly increases the risk of a trespass, just as a land ownership system without effective an recording system would do. But there is no social value in a system that creates poorly defined property rights just so that entrepreneurial people are more likely to commit a trespass and then will have to pay the consequences. Further, the consequences are not limited to the simple cost of trespassing. Because investment is so path dependent a late discovered infringement may lock the investor into a situation in which it has no choice but to stick with an investment it has already made, giving the patentee an effective monopoly right against a locked-in developer.⁵⁹ Patent values are not efficient unless they can be determined ex ante, before a developer has made the relevant commitments and when it can assess the full range of alternatives.

Conclusion: Patent Failure, Interest Groups, and Competition Policy

One could address these failures in the patent system in numerous ways,⁶⁰ including but not limited to: (1) providing for better notice through a variety of processes, including greater discipline on abstract language in patent claims, limitations on the continuation process,⁶¹ or a less expansive doctrine of equivalents;⁶² (2) require knowledge, or copying, as a precondition of infringement;⁶³ or (3) limit infringement awards to prospective relief, at least against innocent infringers. A combination of these things could be helpful as well. Some of this might be accomplished by statutory construction,⁶⁴ although most would probably require amendment of the statutes.

However, it is not obvious that antitrust will be particularly useful in forcing

⁵⁹ The problem can be solved in some cases by estoppels rules, but only if there is a clear misrepresentation. See *Qualcomm, Inc. v. Broadcom Corp.*, 548 F.3d 1004 (Fed. Cir. 2008) (applying equitable estoppels against enforcement of patent where patentee participated in standard setting organization and made false representations about its patents). See also *Broadcom Corp. v. Qualcomm, Inc.*, 501 F.3d 297 (3d Cir. 2007) (similar conduct may have constituted unlawful monopolization).

⁶⁰ For one proposal, see F. Russell Denton, *Plumb Lines Instead of a Wrecking Ball; A Model for Recalibrating Patent Scope*, 16 J. INTEL.PROP.L.1 (2008).

⁶¹ See Bessen and Meurer, note ___.

⁶² See Samson Vermont, *Taming the Doctrine of Equivalents in Light of "Patent Failure,"* 16 J.INTELL.PROP.L. 83 (2008).

⁶³ On this issue, see Samson Vermont, *Independent Invention as a Defense to Patent Infringement*, 105 MICH.L.REV. 475 (2006); Carl Shapiro, *Prior User Rights*, AM. ECON. REV. 92, 95 (may 2006); Mark A. Lemley, *Should Patent Infringement Require Proof of Copying?*, 105 MICH.L.REV. 1525 (2007).

⁶⁴ On use of statutory construction to address capture problems arising under the Copyright Act, see Christina Bohannon, *Reclaiming Copyright*, 23 Cardozo Arts and Ent'mt L.J. 567 (2006).

any of these reforms. Indeed, one of the ironies of our situation is that the very imperfections that serve to make the patent system function so poorly and often anticompetitively also make antitrust a poor instrument for dealing with it.⁶⁵

Walker Process is the weak doctrine that it is precisely because patent boundaries are so ambiguous. Given the strong constitutionally protected set of rights that we have to access our government, including its court system, *Walker Process* kicks in only when it is clear that no reasonable person acting in good faith would have made the patent claim that was made under the circumstances. But the more ambiguous the claim, the more reasonable people will differ about its scope. As a result the very ambiguities that make the system so harmful for smaller firms also serve to undermine antitrust enforcement. And this is a significant problem in light of the very substantial contribution that small firms make to innovation,⁶⁶ as well as the fact that they are often the target of infringement suits that are improperly brought by firms that have far greater litigation resources than themselves.⁶⁷

To the extent patent failure results from interest group capture it is because private interests do not align themselves with the public interest. For the most part, patent owners (whether inventor or assignee) want patents that cover as much as possible, last as long as possible, and have the fewest possible limitations on the way they can be used or licensed. Those concerned about the risk of committing infringement largely want the opposite. The interest group whose interests most closely converge with the public interest as stated in the Constitution⁶⁸ is consumers, who presumably benefit from optimal rates of innovation. In that sense the goal of an efficient IP system is identical to the goal of an efficient antitrust system.⁶⁹ But in IP as in antitrust, consumers are rarely recognized at the legislative bargaining table.

First and foremost, patent reforms must come from new legislation, new judicial interpretation, or new regulatory initiatives in the PTO. But we live in an imperfect world, and those reforms may be a long time in coming, and indeed they may not come at all. Or we may discover that both political and practical impediments to internal reform are great.

⁶⁵ On this point, see Christina Bohannon and Herbert Hovenkamp, *IP and Antitrust: Errands into the Wilderness* (unpublished manuscript on file with authors).

⁶⁶ See Anthony Breitzman and Diana Hicks, *An Analysis of Small Business Patents by Industry and Firm Size*, (SBA Office of Advocacy, Nov. 2008), available at <http://www.sba.gov/advo/research/rs335tot.pdf> (finding that small firms tend to innovate more on a per employee basis, and that the patents that small firms develop tend to be of a higher quality than those developed by large firms).

⁶⁷ See Christopher R. Leslie, *Patents of Damocles*, 83 INDIANA L.J. 133 (2008).

⁶⁸ United States Const. Art. I, §8, cl. 8.

⁶⁹ On the consumer welfare principle in antitrust, see HERBERT HOVENKAMP, *THE ANTITRUST ENTERPRISE: PRINCIPLE AND EXECUTION* 13-20 (2006).

To be sure, the history of antitrust in other regulated markets may provide some wisdom. One important difference between the patent system and most of the regulatory regimes in which regulatory immunities apply is the duration of supervision. In industries such as securities and telecommunications, the subject of two relatively recent antitrust/regulation decisions,⁷⁰ the regulatory agency supervises not merely the creation of interests but also their ongoing behavior. Indeed, a common characteristic of regulated industries is ongoing supervision of a firm's activities. The patent system differs in this respect. While we have a great deal of supervision over the patent creation process, once a patent is created government agencies have relatively little to say about how it is used. In the regulatory context this is important because the Supreme Court has emphasized that active regulatory oversight of private discretionary conduct is essential to antitrust immunity.

This suggests a more important role for antitrust during the "post-grant" period, although a very limited role respecting things that happen during the patent application process itself, where the PTO is the effective decision maker and exercises considerable control over the patent application process. In fact, the system that we have has evolved largely along these lines. But the lingering effects of the patent application process continue to bedevil antitrust courts long after patents have been granted, and indeed, even during their twilight. Reverse settlement payments are a good example.⁷¹ The courts defer to the regulatory problem of poor boundaries by approving blatantly anticompetitive market division agreements. We would prefer that the courts strike a different balance by giving less deference to a badly designed patent policy and more to antitrust.

⁷⁰ *Verizon Communications Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 US 398, 413 (2004); *Credit Suisse Securities (USA) LLC v. Billings*, 551 U.S. 264 (2007).

⁷¹ See discussion *supra*, text at notes ____.