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ANTITRUST AND INNOVATION: WHERE WE ARE AND WHERE WE SHOULD BE GOING

HERBERT HOVENKAMP*

The primary purpose of antitrust law is to promote competition. However, both antitrust law and intellectual property law for large parts of their history have worked so as to undermine innovation competition by protecting too much. Antitrust policy often has reflected exaggerated fears of competitive harm and responded by developing overly protective rules that shielded inefficient businesses from competition at the expense of consumers. By the same token, the intellectual property laws have often undermined rather than promoted innovation by granting intellectual property holders rights far beyond what is necessary to create appropriate incentives to innovate. As a result, these laws have often increased the costs of innovation in markets where innovation requires building on the works of others.¹

Perhaps the biggest intellectual change in recent decades is that we have come to see patents less as a species of monopoly and more as a kind of property.² Overall this shift has been a good development because patents rarely confer substantial market power. Further, their other attributes make them behave more like simple property rights, with the attendant right to exclude, than like monopoly. However, this makeover in conception also has contributed to some less desirable expansions in the patent system. Significantly, the “proPERTIZATION” of patent law has not been attended by the development of other requirements that apply to most types of property. One principle of property law is that claimants have the obligation to articulate clear boundaries of ownership, with the penalty for ambiguity often being loss of title. Another principle is that property owners must communicate timely and effective notice of their claims, because the cost of giving notice is typi-

* Ben V. & Dorothy Willie Professor of Law, University of Iowa. I thank Christina Bohannan and Erik Hovenkamp for their comments. This article originally was given as the keynote speech at the Stanford/ABA Conference on Antitrust and Innovation (May 19–21, 2010).

¹ See generally CHRISTINA BOHANNAN & HERBERT HOVENKAMP, CREATION WITHOUT RESTRAINT: PROMOTING LIBERTY AND RIVALRY IN INNOVATION (forthcoming 2011).

² *Id.*

cally much lower than the cost of searching. As James Bessen and Michael Meurer so carefully pointed out in *Patent Failure*, patent law remains an area where we call it property without seriously requiring it to behave like property.³ The amount of overprotection and wasted resources that results is enormous.

For the most part, the patent system must confront these problems of overprotection and excessive abstraction for itself, and antitrust has relatively little place. For present purposes, I want to offer a few principles for antitrust analysis in innovation-intensive markets, particularly those claims that involve the exercise of patent rights.

First, it is not the purpose of antitrust to fix defects in other regulatory regimes, particularly when those regimes are federal. Antitrust law was designed as a corrective for private markets. But where intellectual property law leaves questions open, antitrust policy should feel free to seek the most competitive outcomes as long as they do not frustrate the underlying regulatory regime. Although one should not push the point too far, antitrust law, which is judge-made, claims relatively more freedom from interest group capture than does statutory intellectual property law. And if antitrust tribunals go too far, Congress can be trusted to respond to the voices of intellectual property holders, who have consistently shown themselves to be a more effective interest group than intellectual property users or consumers.⁴

Second, administrability is key. Neither antitrust nor intellectual property law has any moral content. Their sole purpose is to make the economy bigger. Antitrust law does this mainly by looking for and remedying output reducing restraints as well as exclusionary practices by dominant firms that prevent new competition from arising or developing. Intellectual property's mandate is also clear. It is to promote innovation—that is, the progress of science and useful arts. Patent and copyright law satisfies this Constitutional purpose only when the protections that they give increase ex ante incentives to innovate. At the same time, government intervention is costly. As a result, intervention under either antitrust or the intellectual property laws is justified only when Congress or a tribunal has a defensible reason for thinking that intervention will lead to more competition in the case of antitrust or more innovation in the case of intellectual property law.

Third, not every apparent conflict between antitrust law and intellectual property law is real. Many intellectual property practices, such as tying ar-

³ JAMES BESSEN & MICHAEL J. MEURER, *PATENT FAILURE: HOW JUDGES, BUREAUCRATS, AND LAWYERS PUT INNOVATORS AT RISK* 46–72 (2008).

⁴ See Christina Bohannon, *Reclaiming Copyright*, 23 *CARDOZO ARTS & ENT. L.J.* 567 (2006); EINER ELHAUGE, *STATUTORY DEFAULT RULES: HOW TO INTERPRET UNCLEAR LEGISLATION* (2008) (proposing use of statutory default rules to limit special interest capture).

rangements, may increase the returns to innovation or licensing without doing any harm whatsoever to competition or consumer welfare.⁵ As a result, antitrust policy has no reason for intervening. Much of its historical, excessive aversion to tying was really an aversion to patents. At the other extreme are some cases, such as reverse payment pharmaceutical settlements, where the competitive harm is serious and the gains to the patentee are often nothing more than a windfall in excess of that which it could reasonably have anticipated when the innovation was undertaken.⁶ Approving such settlements does nothing to further the incentive to innovate, while doing great harm to consumers from reduced output and higher prices. In the middle are a few cases, such as direct challenges to innovation itself, where true conflicts between competition policy and innovation policy can emerge.⁷

Fourth, economic growth theory, which examines the sources of increased productivity or wealth, remains controversial, and its different schools continuously fault one another's assumptions and methodologies.⁸ Nevertheless, there seems to be broad consensus that the gains to be had from innovation are larger than the gains from simple production and trading under constant technology. The strong version of this view suggests that, in cases where serious tradeoffs are to be made between innovation and competitiveness, we give the nod to innovation. Such a principle is important, for example, when we face the claim that an innovation is an antitrust violation because the innovation itself is exclusionary—a type of claim that antitrust wisely either rejects or else limits to situations where the innovation at issue is no innovation at all, but only an attempt to contrive incompatibility with the complementary products of rivals.

A clear lesson is that just as innovation promises greater growth than market movements toward competition, so too can *restraints* on innovation do more harm.⁹ In this area, intellectual property and antitrust pull in the same direction. Both are served by condemning restraints that limit the likelihood or range of innovations unreasonably. Of course, proof is a problem, but the

⁵ See Erik N. Hovenkamp & Herbert Hovenkamp, *Tying Arrangements and Antitrust Harm*, 52 ARIZ. L. REV. 925 (2010) (arguing that the majority of tying arrangements produce welfare gains and net consumer benefits).

⁶ See BOHANNAN & HOVENKAMP, *supra* note 1, ch. 3; C. Scott Hemphill, *An Aggregate Approach to Antitrust: Using New Data and Rulemaking to Preserve Drug Competition*, 109 COLUM. L. REV. 629 (2009); Daniel A. Crane, *Per se Illegality for Reverse Patent Settlements?*, 61 ALA. L. REV. 575 (2010); Michael A. Carrier, *Unsettling Drug Patent Settlements: A Framework for Presumptive Illegality*, 108 MICH. L. REV. 37 (2009).

⁷ See HERBERT HOVENKAMP, MARK D. JANIS, MARK A. LEMLEY & CHRISTOPHER R. LESLIE, *IP AND ANTITRUST: AN ANALYSIS OF ANTITRUST PRINCIPLES APPLIED TO INTELLECTUAL PROPERTY LAW* ch. 7 (2d ed. 2010).

⁸ BOHANNAN & HOVENKAMP, *supra* note 1, ch. 8.

⁹ See Herbert Hovenkamp, *Restraints on Innovation*, 29 CARDOZO L. REV. 247 (2007).

antitrust case law contains ample evidence of both concerted and unilateral exclusionary practices whose only reasonable purpose was to keep competitors' innovations from being developed or marketed.¹⁰ In these cases, antitrust has an obligation to step in.

Fifth, innovation is not the same thing as patent or copyright law. Antitrust tribunals should not presume that merely because something is lawful under the intellectual property regime, it serves to incentivize innovation. At its best, intellectual property law is based on a series of hunches about basic principles. It reflects consideration over what types of markets and innovations require protection, or, alternatively, when we would be better off to let more market-centered approaches control, such as allowing first mover advantages or secrecy. If we do create legal protections, we face considerable uncertainty about their optimal duration and scope.

Further, the intellectual property law that we have hardly represents legislation "at its best." Rather, these statutes are the product of a heavily interest group-driven political process in which over time the interest groups representing rights holders have spoken much more powerfully than the interest groups representing users.¹¹ These issues will never be resolved with finality, and there is no reason for believing that courts have some natural advantage over legislators in identifying optimal rules. It does suggest, however, that when practices seem quite clearly anticompetitive and the intellectual property statutes do not speak to them with clarity, the nod should be given to antitrust.

A good example is "reverse payment" settlements of intellectual property disputes in the pharmaceutical industry. The Patent Act¹² permits restricted licenses to actual producers, and the restrictions may include territorial divisions or customer or product divisions, which are typically termed "field of use" restrictions.¹³ These restrictions are usually output increasing. By using them, the patentee adds at least one producer to a portion of the market. For example, the patentee of a sound system could produce and sell it to both commercial and residential users itself or choose one or the other of these,

¹⁰ *E.g.*, *Allied Tube & Conduit Corp. v. Indian Head, Inc.*, 486 U.S. 492 (1988) (dominant producer of steel conduit manipulates standards organization so as to deny approval to plaintiff's innovative PVC conduit); *Am. Soc'y Mech. Eng'rs, Inc. v. Hydrolevel Corp.*, 456 U.S. 556 (1982) (dominant manufacturing firms manipulate standard setting society so as to deny certification of plaintiff's innovative valve); *United States v. Microsoft Corp.*, 253 F.3d 34, 77-78 (D.C. Cir. 2001) (Microsoft pressuring Intel to refrain from developing Java-enabled processor). *See generally* Hovenkamp, *supra* note 9.

¹¹ In patents, see Robert P. Merges, *One Hundred Years of Solicitude: Intellectual Property Law, 1900-2000*, 88 CALIF. L. REV. 2187 (2000). In copyright, see Bohannon, *supra* note 4.

¹² 35 U.S.C. § 282.

¹³ 35 U.S.C. § 261 (territorial restrictions); *Gen. Talking Pictures Corp. v. W. Elec. Co.*, 304 U.S. 175 (1938) (customer division agreement via field-of-use restriction).

refusing to license to others. Alternatively, however, it could license another to make the systems for residential users, while retaining the commercial user market.¹⁴ Such field-of-use licensing is a kind of production joint venture. The licensor and licensee benefit themselves and society by the cost reductions that result from use of a common technology.

In sharp contrast, a naked payment of money to a rival to abandon infringement litigation and not produce at all does nothing to increase output in any market. There is no shared use of technology and no prospect of market expansion. Nothing in the Patent Act authorizes a patentee to pay a rival simply to stay out of its market. Such practices themselves, if naked, are per se anti-trust violations, and some of them are even criminal offenses. The courts that have allowed such payments cite the presumption of patent validity and a strong preference that intellectual property disputes be settled.¹⁵ Settlement ends the cases without involving courts in all of the uncertainty that attends litigation about validity or infringement.

We sometimes say that this preference applies to settlements of all kinds, but that is not really the case. For example, suppose a gasoline station operator files a “trespass” action against a neighbor building a competing gasoline station. The plaintiff in this case has no title whatsoever to the defendant’s land. The parties then settle their dispute by an agreement under which the station owner pays “exit payments” to the newcomer, who shuts down. No court would think twice about examining the title record and seeing that this entire lawsuit was a ham-handed sham to cover a naked market division agreement.

The problem with exit payment settlements is not that they are settlements. Rather, it is that the state of intellectual property titles is so poor that the litigation has highly uncertain outcomes. Courts need to look less at the validity of the infringement action and more at the nature and size of the payment. One way of getting at the problem would be to say that the payment of a large sum defeats the presumption of validity and requires the patentee to establish it in any challenge to the legality of the reverse payment itself. This rule would not be inconsistent with the Patent Act’s statutory presumption of patent validity. It is merely an observation that a presumption holds true only so long as no one comes forward with evidence rebutting it. The patentee’s payment of many millions of dollars to a generic drug maker to abandon its chal-

¹⁴ This general form of distribution was used in *General Talking Pictures*, 304 U.S. at 179–80 (licenses limited to either commercial or private fields).

¹⁵ *E.g.*, *Ark. Carpenters Health & Welfare Fund v. Bayer AG*, 604 F.3d 98, 104–06 (2d Cir. 2010), *cert. denied*, 131 S. Ct. 1606 (2011); *In re Ciprofloxacin Hydrochloride Antitrust Litig.*, 544 F.3d 1323, 1332–34 (Fed. Cir. 2008); *Schering-Plough Corp. v. FTC*, 402 F.3d 1056, 1065–68 (11th Cir. 2005).

lenge reflects objective doubts that a patent was either valid or infringed under the circumstances. With the presumption of validity thus removed, the court could take a closer and more neutral look at the validity issue.

Sixth, antitrust is not the exclusive protector of competition in innovation intensive markets. Many competition issues can be addressed more effectively through the IP statutes themselves, either alone or in addition to prudent application of the antitrust laws. One example is the law regarding refusal to license IP rights. The need arises most heavily in markets involving networking or standard setting, where denial of access can have crippling consequences. In part, the problem results from failures in IP policy. For example, to the extent we continue to grant patents on fairly trivial inventions that other users of the same technology are likely to discover on their own, holdup is a major problem. Further, the patent system's notice provisions are so deficient that investors too often commit to networked architecture only to find out later that they are infringing the rights of another.¹⁶

The problem with using antitrust to address such problems is that its mandatory provisions for treble damages and attorney's fees are much too severe. This imbalance has led courts to compensate by creating overly restrictive substantive doctrine. Within the current regime, the best way to address refusal to deal issues is often to look for solutions in both patent law's remedial system and antitrust. For example, antitrust together with intellectual property is often a better vehicle for addressing such problems as "interconnection" and lack of neutrality in networked communications. Regulatory solutions have tended to go too far, requiring interconnection and sharing even when doing so inefficiently diminishes investment incentives. By contrast, antitrust law has largely abandoned the area by developing a rule of virtual per se legality for unilateral refusals to deal.¹⁷ Interconnection problems in networks cannot be properly addressed until we do two things. First, we must define the appropriate scope of individual property rights, essentially a task of intellectual property law. Second, we must define the circumstances under which interconnection promotes competition, which is essentially a job for antitrust.¹⁸

¹⁶ Cf. Christina Bohannon & Herbert Hovenkamp, *Concerted Refusals to License Intellectual Property Rights*, 1 HARV. BUS. L. REV. ONLINE 21, 22 (2011) (examining dispute over a joint venture patent license for an unused claim entered into to prevent the claim from blocking other patents in the license), http://www.hblr.org/wp-content/uploads/2011/01/Hovenkamp_Online_Article.pdf.

¹⁷ Pac. Bell Tel. Co. v. linkLine Commc'ns, Inc., 555 U.S. 438 (2009); Verizon Commc'ns Inc. v. Law Offices of Curtis V. Trinko, LLP, 540 U.S. 398 (2004).

¹⁸ These issues are explored in depth in BOHANNAN & HOVENKAMP, *supra* note 1, chs. 1, 3-4, 10.

The same thing can be said of collaboration. Antitrust has moved from a posture of hostility toward collaboration, condemning even efficiency-creating ventures with small market shares, to a position that is much more sensitive to the innovation potential of joint research and production. Intellectual property law needs to make a similar movement. But intellectual property law is hampered by excessive propertization and holding out. The principal problem from the antitrust perspective is collusion; the principal problem from the intellectual property perspective is exclusion, together with the costly problems of innovating around, excessive damages, and double marginalization that can result when effective schemes for sharing intellectual property rights are not in place.

Seventh, intellectual property law can take some important lessons from the road that antitrust has taken toward reform and redemption. Roughly forty years ago antitrust pursued a course of protecting small competitors at consumers' expense and even condemning such practices precisely because they reduced costs. Then, in the late 1970s, the Supreme Court dramatically shifted the ground by developing the "antitrust injury" doctrine.¹⁹ The Court required not only that injury be clearly proven but also that it be the right kind of injury—that is, injury to competition and not merely injury to the plaintiff. Further, this transformation was accomplished entirely by the Supreme Court, largely in the face of congressional indifference and in apparent conflict with a private injury statute that guarantees liberal recovery for every kind of injury.²⁰ The courts accomplished it without Congress. Intellectual property should do much the same thing. An essential part of an infringement lawsuit should be proof of actual injury-in-fact of a kind that diminishes the ex ante incentive to innovate.²¹

To that end, intellectual property law would profit by continuously examining its root motivations as antitrust law does. Requirements like "antitrust injury" force antitrust courts to ask in each case whether a practice really injures competition or simply harms the plaintiff's business. By the same token, courts evaluating intellectual property claims should consciously relate those claims to the incentive to innovate.

This is an exciting time for those involved in the field of antitrust and intellectual property, and a great deal of work remains to be done. As John Maynard Keynes observed in the often-quoted conclusion of *The General Theory*,

¹⁹ *Brunswick Corp. v. Pueblo Bowl-O-Mat, Inc.*, 429 U.S. 477 (1977); see also 2A PHILLIP E. AREEDA & HERBERT HOVENKAMP, *ANTITRUST LAW* ¶¶ 335–337 (3d ed. 2007).

²⁰ 15 U.S.C. § 15(a) (treble damages for "any person who shall be injured in his business or property" by an antitrust violation).

²¹ See Christina Bohannon & Herbert Hovenkamp, *IP and Antitrust: Reformation and Harm*, 51 B.C. L. Rev. 905 (2010) (proposing a concept of IP injury that limits IP remedies to harms relating to diminishing innovation incentives).

where he faulted Karl Marx for thinking that vested economic interests inevitably control all political processes:

[T]he ideas of economists and political philosophers, both when they are right and when they are wrong, are more powerful than is commonly understood. Indeed the world is ruled by little else. . . . Madmen in authority, who hear voices in the air, are distilling their frenzy from some academic scribbler of a few years back. I am sure that the power of vested interests is vastly exaggerated compared with the gradual encroachment of ideas. . . . [S]oon or late, it is ideas, not vested interests, which are dangerous for good or evil.²²

As a scholar I have always found those to be provocative and uplifting words. For those who are currently engaged in scholarship or hope to be in the future, this time is particularly relevant for good research and writing in this field. In few areas of law do the courts pay as much attention.

²² JOHN M. KEYNES, *THE GENERAL THEORY OF EMPLOYMENT, INTEREST AND MONEY* 383 (1935).