

PART II

Intellectual Property: Moral and Legal Concerns

Intellectual Property Is Still Property

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I agreed to discuss intellectual property at this symposium to fulfill the duty of every judge of an inferior federal court: to praise my superiors. It also offered a chance to explore a corner of federal law closed to judges such as me by the Federal Circuit's exclusive jurisdiction of patent questions.

Judges long took a Manichaeian view of intellectual property. There is the good side: invention, equating to progress. New and better products and methods of making them are the principal source of economic betterment. The gains they produce swamp all other forms of wealth—even one percent per year compounded over a long period yields fabulous returns. Then there is the dark side of the Force: monopoly. To give someone a patent is to give him the right to control output, with the associated overcharge. This means not only a transfer of wealth but also a short-term loss in allocative efficiency. Whether the long-run gains outweigh the short-run losses is a difficult question, on which the patent laws struck a rough balance.

Economists also spoke of intellectual property in the same way. Joseph Schumpeter proposed that monopoly is a spur to innovation because the monopolist could amass the full gains from invention. He thought that the long-run gains from innovation outweigh the allocative loss and was satisfied with this trade.¹ Most economists disagreed, thinking monopoly unambiguously evil. Judges were skeptical, resolving conflicts in favor of competition—and defining anything other than Adam Smith's atomistic pin-makers as monopoly. Thus the antitrust laws had a strict rule against tying patented articles to unpatented ones. Lest the monopoly be "extended"² the patent laws were read as implicitly prohibiting any other way to protect intellectual property. The *Sears*³ and *Compco*⁴ cases of 1964, which held state anti-copying laws inconsistent with the balance struck by the patent laws, are the starkest expressions of this perspective.⁵ Judges found this convivial because they understood patent laws as a swap of protection for "disclosure"; an inventor who disclosed his product to the public with protection obviously

didn't "need" the inducement provided by monopoly. In addition, because the deal was seventeen years, protection of a defined product in exchange for disclosure there could be no extension of the domain in time or product. This left out of the equation any consideration of incentives to invent in the first place. It was a classic *ex post* view of the world, assuming that the invention had been made and asking only whether we would have benign competition or wicked monopoly.⁶

Problem: Patents are not monopolies, and the tradeoff is not protection for disclosure. Patents give a right to exclude, just as the law of trespass does with real property. Intellectual property is intangible, but the right to exclude is no different in principle from General Motors' right to exclude Ford from using its assembly line, or an apple grower's right to its own crop. A patent may create a monopoly—just as an auto manufacturer may own all of the auto production facilities—but property and monopoly usually differ. That a patent covers an "entire" idea or product no more implies monopoly than the fact that USX Corporation owns the "entire" South Works in Chicago. Frequently, indeed almost always, different patented goods and processes compete with each other and with unpatented goods and processes. Before crying "monopoly" in either case, we must determine what substitutes a customer could obtain and whether the seller could raise prices by curtailing output.

The idea that a patent represents an exchange of protection for disclosure makes no sense, except perhaps with respect to process patents. The product itself, not the patent papers, usually discloses things. Inventors want and need patents only when disclosure is inevitable in the absence of protection. When the product can be sold without disclosure, the manufacturer can use trade secret law to protect its contribution, getting even better protection—not only perpetual, but also guarding by secrecy against infringement. Infringement is difficult to detect and penalize; why disclose anything in exchange for what is at best a limit on the duration of your returns? Lawyers use the utmost skill to draft patent applications so that they do not disclose enough to practice the invention, and the omitted details frequently are vital. Patents thus are valuable when the product itself, not the papers filed in the Patent Office, discloses the invention.

The tradeoff is not monopoly versus competition, or protection in exchange for disclosure. It is dynamic gains in exchange for

allocative losses. The lure of extra return induces extra invention—valuable invention, too, because unless an idea is better than the next-best way of doing things, there won't be a reward. After the creation, though, compensating the inventor reduces the use that can be made of the idea. If General Motors uses its plant twenty-four hours a day, nothing is left for Ford to use. Ordinary property is occupied and wears out to boot. Intellectual property can be used by many at once, without being used up. The marginal cost of its use is zero; intellectual property rights allow the inventor to set price in excess of marginal cost and therefore create an allocative loss—although usually a small one, limited by the second-best technology in the market. Allocative loss accompanies the reward for invention.

This is not necessarily a "monopoly" reward, though. Price exceeding marginal cost of use, given the existence of the asset, is common in competition. Any time a business creates a specialized asset, one that cannot be turned to other uses after its creation, we could say that the asset should be "free" for all—because to charge a price for use is to discourage that use and give the owner "more" than necessary to hold the asset in the business. Think of a large printing press, which cannot be moved or devoted to some other use (the metal in it could have been used to produce cars, but the die was cast with construction). If the owner of the printing press were forbidden to charge a price in excess of the maintenance and electricity needed to get it to work, the press wouldn't be turned to some other use. So it looks like any payment covering the cost of constructing the press is "too much," just as any compensation for the use of a patented idea is excessive. Nonetheless the owner must be paid; else there would be too few presses tomorrow. Payment is compensation for the value of the asset, not for monopoly. Economists call such payments quasi-rents, and they are common in every industry with specialized assets.⁷

The patent system has effects other than compensating inventors. As Edmund Kitch stressed, many patents are useless in themselves yet convey rights to coordinate development and standardize products, and therefore they may promote social welfare by cutting down the time between invention and commercial production, while yielding uniform standards.⁸ This proposition is something any admirer of Japanese processes concedes, although the initial reaction to Kitch's idea was hostile.⁹ Patents also create the opportunity to engage in price discrimination, which reduces

the allocative loss of intellectual property. The price-discriminating patent holder extracts a return on invention (encouraging new ideas), while pricing less than the second-best technology where the holder encounters competition (ensuring that the customer does not substitute away from the patented, but costly, item)—the best of both worlds.¹⁰

I started by saying that I came in praise of my superiors. What I meant is that in recent years the Justices have seen the real tradeoff and dropped the cant. In *Kewanee*¹¹ they allowed trade secret law to exist—and a brief from Kitch may have helped.¹² In *Aronson*¹³ they allowed private contracts for intellectual property to be enforced even though an application for a patent had been denied. Old rhetoric about intellectual property equating to monopoly seemed to have vanished, replaced by a recognition that a right to exclude in intellectual property is no different in principle from the right to exclude in physical property. In the *Betamax* case¹⁴ the Justices recognized the tradeoff between optimal use (at marginal cost of zero) and optimal creation, looking at things in advance and on the margin rather than inquiring what would be a “fair” return given yesterday’s successful intellectual endeavors.

This recognition of the real nature of the problem had reverberations in antitrust law as well. Old cases holding that copyrights and patents are monopolies, so that tie-ins and bundling are illegal per se, were condemned to benign neglect. In 1979, the *BMJ* case¹⁵ upheld the blanket license issued by copyright owners, recognizing that this apparently tied package was just a low-cost method of selling, and in particular was terrific price discrimination: the network could use songs at no marginal cost while still rewarding authors.¹⁶ The tying doctrine was linked to market power in *Hyde*,¹⁷ and although some lower courts missed the message and continued to hold that copyrights and patents are monopolies, most got on board.¹⁸

Congress is moving in the same direction. In February 1989 the Senate Judiciary Committee reported out the Intellectual Property Antitrust Protection Act of 1989, providing that patents, trademarks, and copyrights do not support a presumption of market power.¹⁹ Bye-bye any special treatment of tying and other practices just because intellectual property is in the picture. The bill assimilates intellectual property to other property, recognizing that the right to exclude others from using your idea is no more a monopoly

than is the right to exclude others from using your barn. All depends on what the market share of each may be.

Treating intellectual property as property should appeal not only to utilitarians but also to libertarians. Intellectual property is no less the fruit of one’s labor than is physical property. True, you need the government to enforce your property right by preventing strangers from using your ideas to make their own products, but you ordinarily need the government to enforce your rights in physical property against predators. Libertarians should be especially pleased that you can create most of the interesting features of intellectual property by contract. For example, a manufacturer may refuse to sell its widget but lease it on terms that prevent its duplication or sale. Common-law rules about “restraints on alienation” don’t apply to leased products—and anyway are limitations on contract rather than limits on what could be done by contract in principle. An author may do the same as an inventor (contractual limitations of this kind have become common in the area of computer software). The one important feature of patent law that cannot be created by contract between seller and customer is the rule that only the first among independent inventors obtains the right to exploit the idea, and even this could, in principle, be created by agreement in advance among those working in the same fields. We see a few such agreements, called “patent pools,” and although some of these doubtless violate the antitrust laws (they are equivalent to horizontal mergers), they are still private arrangements.²⁰

Contracts limiting the use of intellectual property are hard to enforce because violations are so hard to detect—one reason why patent holders so often sue contributory infringers that furnish unpatented, but essential, articles to the true infringers. A federal law of intellectual property may promote enforcement while duplicating the terms that would (presumptively) be set by contract. If Congress misunderstands the optimal terms, any of the entitlements pre-set in the law may be eliminated by contract. Authors and inventors may put their work in the public domain. If they obtain copyrights or patents, they may sell on terms that curtail their rights. Customers could refuse to buy except on terms that limit the sellers’ statutory rights, or demand compensation (in the form of a lower price) if the sellers insist on maintaining these rights. So in the end intellectual property may be understood as the result of voluntary undertakings, which the government simply enforces. Many contemporary cases treat it this way.

Yet for all this, my plan to ingratiate myself with my superiors by lavishing praise on their astuteness, their wisdom, and their all-around goodness has come unglued. For less than a month ago, the Court took a step in the wrong direction--and took it unanimously. The case is *Bonito Boats, Inc. v. Thunder Craft Boats, Inc.*²¹ The problem is the copying of unpatented articles, here a boat hull. Florida passed a law forbidding the copying of hulls by using an existing product to form a mold, then using the mold to reproduce the hull.

Such a law forces the copier to bear the same costs to a part as the originator. The originator must design the product, make a wooden model, and then use the model as the basis of a mold. This is difficult and costly. Under the Florida law, the costs of production for all firms making an item in the public domain should be similar. Even so, the copier retains vantage for two reasons. First, the copier does not bear the costs of design. Second, there is a selection bias. You can think of innovation (or design in general) as a process of prospecting. There will be hits and misses. The original designer bears the costs of both; the copier duplicates only the hits. These differential costs make it worthwhile to be a copier rather innovator even under the Florida law. Much of the law of intellectual property, like Florida's statute, is designed to prevent such cherry-picking. In economic terms, the first producer faces a "barrier to entry" because its costs will exceed those of the copier. Removing barriers to entry often is thought to be an important objective of economic policy.²²

Now from my affecting tale--of never-ending progress legal thought, Excelsior!--one would have supposed that the Court would examine this law by asking whether requiring the imitator to bear the same costs as the originator contradicts any rule of patent law--which it doesn't. Patent law addresses whether you can make something at all, not whether there is to be a "level playing field" in the costs of manufacture. A legislature might believe that the innovator's advantage from its product on sale first is large enough to attract creative efforts, or it might believe that selection bias is so serious that the first mover needs a rule equalizing production costs. But as these questions of manufacturing processes are outside the main of patent law, we should expect the Supreme Court to put the case aside. Florida's law, after all, offered much less protection than trade secrets, which allow the designer of a process to keep the rewards until rivals "reverse engineer" the product--a process often more costly than developing it in the first place.

Patent law differs from Florida's statute in other ways. To have a patent is to be able to block anyone from making and selling your item, even if the second producer designed it independently. Florida didn't offer that boon; its law governed manufacturing within its borders and did not ban independent design. The statute inevitably was limited to copying; a truly independent designer would have started from wooden models much like the original manufacturer. Any adverse effects, therefore, would be felt within Florida. Federal law presumptively leaves states free to follow their own destinies.²³ Perhaps price of boat hulls would rise in Florida, but manufacturers could use injection molding in Mississippi to sell to Louisiana boaters. No one doubts that Florida could set minimum prices for boat hulls, as New York does for milk; that Florida could impose a ten-percent tax on injection molding, just as Minnesota used to tax margarine to encourage the use of butter; or that Florida could favor one method of production over others by a myriad of devices, just as states commonly favor ophthalmologists over opticians by limiting who can write prescriptions for eyeglasses. States often establish monopolies, as in the liquor and electricity businesses. Any of these may be wasteful--I suspect most of them are--but the gains and losses are felt locally. When the voters pay the piper, they may call the tune.

Federal law does not preempt all bad state laws, and the existence of a "balance" in federal law does not mean the states must adopt the same policy. Thus state trade secret laws are permissible, even though they do not duplicate federal rules. In securities law, the Williams Act reflects one balance for regulating tender offers, but the Court has held that States may protect managers more than federal law does.²⁴ Indeed, every federal law reflects a balance of some sort: We know that the political forces in Congress went "x far" but no further, because they believed it would be a political or prudential mistake to do so. If the conclusion "x far is right for us" preempted state laws, there could be no state laws.

This is what I had expected the Court to say. It didn't. Instead it told us that patents are monopolies, that by controlling injection molding Florida had bestowed a monopoly on the innovator just as a patent would do, and that the monopoly was unnecessary because the designer had already disclosed boat hull to the public without the lure of patent royalties.

Madisonian questions of federalism went unmentioned. The fact that every federal law reflects a decision about the "right"

amount of regulation, yet without preempting, went unaddressed. No Justice questioned the equation of patent to monopoly. Selection bias did not come up. Only in passing did the Court discuss the link between innovation and compensation for intellectual effort; it seemed fixated instead on some supposed deal by which patents are exchanged for disclosure. The Justices attributed this view to Thomas Jefferson, but his position was subtly different; he opposed the grant of patents for ideas already in the public domain but did not suppose that disclosure and protection are an invariable quid pro quo.²⁵ Anyway, why should a link between disclosure and protection that might have influenced federal policy mold development in the States? We know from Kewanee and other cases that a product need not be patentable to receive protection under state law.²⁶

The proposition that one state's law concerning injection molding gave anyone a monopoly profit is hilarious. There are hundreds of boat manufacturers and thousands of boat designs. Even if fifty percent of these are free from copying in Florida as a result of the state law, there is no monopoly profit to be had. There is a short-run allocative loss if a piece of intellectual property fetches more than the cost of use (that is, if the holder receives any compensation at all for the marginal output), but as I've mentioned, this compensation is a quasi-rent, a reward to the initial investment now sunk into a specialized resource—not a monopoly profit. Under Florida's scheme, the designer never receives more than the difference in the costs of production of the two methods and is unlikely to get even that, being constrained by other boats (including used ones) with other designs. The decision seems to have been based on an economic misconception.

As one who sees interesting cases slaughtered every day by lawyers who parrot the language of older cases rather than figuring out the functional considerations I'm willing to chalk up this opinion to poor input. That's my fallback position when someone criticizes one of my opinions. One case is just an argument, a nudge to the legal culture. Isolated cases are not influential. It takes a pattern, a web of decisions, to have even a small effect on the economic, political, or legal climate.

So, lest the climate turn cloudy, I return to my theme. Rights to exclude are not monopolies just because the property involved is an intangible rather than something you can walk across or hold in your hand. The hard questions concern the right tradeoff between

quasi-rents that create short-run allocative losses and incentives to invent that lead to dynamic gains over the longer course. Patents may promote coordination, price discrimination, and innovation. Except in the rarest case, we should treat intellectual and physical property identically in the law—which is where the broader currents are taking us, in a sweep no hull protection case will stop.

Notes

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1.. See, J. Schumpeter, *Capitalism, Socialism and Democracy* (New York: Harper & Row, 1948).

2. See, e.g., *International Salt Co. v. United States*, 332 U.S. 392, 395-96 (1947).

3. *Sears, Roebuck & Co. v. Stiffel Co.*, 376 U.S. 225 (1964).

4. *Compco Corp. v. Day-Brite Lighting, Inc.*, 376 U.S. 234 (1964).

5. See also *Fashion Originators' Guild of America v. FTC*, 312 U.S. 457 (1941).

6. See W. Bowman, *Patent and Antitrust Law* (1973) pp. 140-99. Ward Bowman describes and trenchantly criticizes the cases embodying this perspective. The many cases provide ample support for Ronald Coase's observation that judges, like economists, attributed every poorly understood arrangement to monopoly: "And as we are very ignorant in this field, the number of ununderstandable practices tends to be rather large, and the reliance on a monopoly explanation is frequent." Coase, "Industrial Organization: A Proposal for Research," in *Policy Issues and Research Opportunities in Industrial Organization* 67 (V. Fuchs ed. 1972), reprinted in R.H. Coase, *The Firm, the Market and the Law* (University of Chicago Press, 1988) p. 67.

7. Economists hotly debate the optimal length of the patent period in a way they do not debate the length of the payment stream for printing presses. Three things underlie this difference: Printing presses wear out in a way that ideas don't; an invention has the potential to dominate an entire market (to monopolize) in a way that physical assets rarely do; and new ideas incorporate old ideas, creating difficult problems of tracing and compensating the contributions. Much of the time, however, we can put differences aside. Ideas do "wear out"; they are superseded by newer and better approaches. Most patents are unsuccessful, and the returns to even the inventions taper down before the end of the seventeen-year period. We grant perpetual life to trademarks and trade secrets, and life exceeding one hundred years to copyrights (technically, the life of the author plus fifty years), precisely because the force of competition from other marks and writings is evident. See Landes & Posner, "An Economic Analysis of Copyright Law," *Journal of Legal Studies* 18 (1989): 325, 361-63.

Copyright and trademark law cover expression but not ideas; copyright and trade secret law do not interfere with independent creations. Patents' potential to monopolize is more serious because now and again an idea proves to be the cornerstone of a flourishing technology. One essential patent might entitle the inventor to control gasoline cracking, plain-paper copying, and so on, with later inventions improving the original idea but not dispensing with it. Yet patents grant the first inventor to exploit the idea even though many other persons might have come up with it soon thereafter, so that the patent holder's contribution to social welfare—the value of the idea during the time before someone else would have devised it—is dramatically less than the allocative loss from an enduring monopoly. It is important to understand, however, that the monopoly return comes from horizontal control of the entire market, something that should be set aside for separate analysis.

The tracing problem arises because new ideas stand on the shoulders of old ideas, and as time passes it becomes difficult to determine how much of the latest idea is attributable to some older one (more likely, to thousands of older ones). If patent holders never behaved strategically, we could disregard the problem because after a time they could not collect royalties covering the costs of tracing; ideas then would be in the public domain in fact if not in law. Rent-seeking behavior is possible, however; patent owners could threaten costly litigation and that