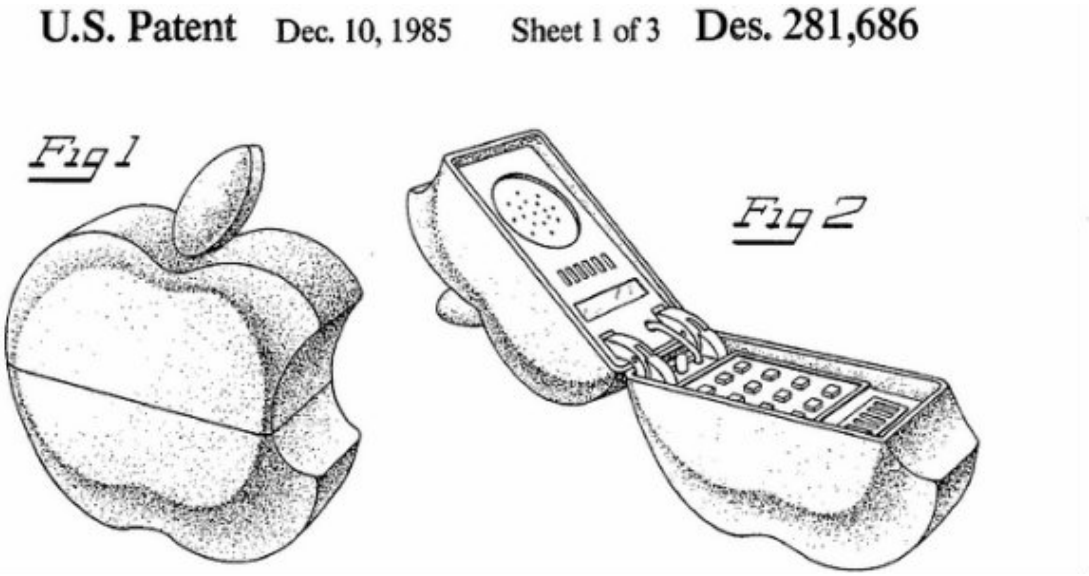
# Why There Are Too Many Patents in America

*By Richard A. Posner*

*After dismissing a high-profile suit between Apple and Motorola, one of our leading jurists discusses the problems plaguing America's intellectual property system.*




(U.S. Patent and Trademark Office)

Recently, while sitting as a trial judge, I dismissed a case in which Apple and Motorola had sued each other for alleged infringement of patents for components of smartphones. My decision undoubtedly will be appealed, and since the case is not yet over with it would be inappropriate for me to comment publicly on it.

But what I am free to discuss are the general problems posed by the structure and administration of our current patent laws, a system that warrants reconsideration by our public officials.*

U.S. patent law confers a monopoly (in the sense of a right to exclude competitors), generally for 20 years, on an invention that is patented, provided the patent is valid -- that is, that it is genuinely novel, useful, and not obvious.

Patents are granted by the Patent and Trademark Office and are presumed valid. But their validity can be challenged in court, normally by way of defense by a company sued by a patentee for patent infringement.

With some exceptions, U.S. patent law does not discriminate among types of inventions or particular industries. This is, or should be, the most controversial feature of that law. The reason is that the need for patent protection in order to provide incentives for innovation varies greatly across industries.

The prime example of an industry that really does need such protection is pharmaceuticals. The reasons are threefold. First, the invention of a new drug tends to be extremely costly--in the vicinity of hundreds of millions of dollars. The reason is not so much the cost of inventing as the cost of testing the drug on animal and human subjects, which is required by law in order to determine whether the drug is safe and efficacious and therefore lawful to sell. Second, and related, the patent term begins to run when the invention is made and patented, yet the drug testing, which must be completed before the drug can be sold, often takes 10 or more years. This shortens the effective patent term, which is to say the period during which the inventor tries to recoup his investment by exploiting his patent monopoly of the sale of the drug. The delay in beginning to profit from the invention also reduces the company's recoupment in real terms, because dollars received in the future are worth less than dollars received today. And third, the cost of producing, as distinct from inventing and obtaining approval for selling, a drug tends to be very low, which means that if copying were permitted, drug companies that had not incurred the cost of invention and testing could undercut the price charged by the inventing company yet make a tidy profit, and so the inventing company would never recover its costs.

So pharmaceuticals are the poster child for the patent system. But few industries resemble pharmaceuticals in the respects that I've just described. In most, the cost of invention is low; or just being first confers a durable competitive advantage because consumers associate the inventing company's brand name with the product itself; or just being first gives the first company in the market a head start in reducing its costs as it becomes more experienced at producing and marketing the product; or the product will be superseded soon anyway, so there's no point to a patent monopoly that will last 20 years; or some or all of these factors are present. Most industries could get along fine without patent protection.

I would lay particular stress on the cost of invention. In an industry in which teams of engineers are employed on a salaried basis to conduct research on and development of product improvements, the cost of a specific improvement may be small, and when that is true it is difficult to make a case for granting a patent. The improvement will be made anyway, without patent protection, as part of the normal competitive process in markets where patents are unimportant. It is true that the easier it is to get a patent, the sooner inventions will be made. But "patent races" (races, induced by hope of obtaining a patent, to be the first with a product improvement) can result in excessive resources being devoted to inventive activity. A patent race is winner take all. The firm that makes an invention and files for a patent one day before his competitors reaps the entire profit from the invention, though the benefit to consumers of obtaining the product a day earlier may be far less than the cost of the accelerated invention process.

Moreover, a firm that can get along without patent protection may have compelling reasons to oppose such protection because of fear of how its rivals may use it against the firm. A patent blocks competition within the patent's scope and so if a firm has enough patents it may be able to monopolize its market. This prospect gives rise to two wasteful phenomena: defensive patenting and patent trolls. Defensive patenting means getting a patent not because you need it to prevent copycats from making inroads into your market, but because you want to make sure

that you're not accused of infringing when you bring your own product to market. The cost of patenting and the cost of resolving disputes that may arise when competitors have patents are a social waste.

Patent trolls are companies that acquire patents not to protect their market for a product they want to produce -- patent trolls are not producers -- but to lay traps for producers, for a patentee can sue for infringement even if it doesn't make the product that it holds a patent on.

These problems are aggravated by several additional factors. One is that the Seventh Amendment to the U.S. Constitution confers a right to a jury trial in cases in federal court if the plaintiff is asking for an award of money damages, as plaintiffs in patent infringement suits normally do. Judges have difficulty understanding modern technology and jurors have even greater difficulty, yet patent plaintiffs tend to request trial by jury because they believe that jurors tend to favor patentees, believing that they must be worthy inventors defending the fruits of their invention against copycats -- even though, unlike the rule in copyright law, a patentee need not, in order to prevail in an infringement suit, show that the defendant knew he was infringing. This problem is exacerbated by the fact that in some industries it is very difficult to do a thorough search of patent records to discover whether you may be infringing someone's patent; and even if doable, the search may be very expensive. Notice too--an independent problem with current patent law -- that difficulties of search, and the prospect of incurring litigation costs to defend an infringement suit, may actually discourage innovation.

Another troublesome factor is that the Patent and Trademark Office is seriously understaffed. As a result, many patent examinations are perfunctory, and there is a general concern that too many patents are being issued, greatly complicating the problems I've been discussing. There is now a three-year backlog in the office--a three-year delay on average between the filing of a patent application and the decision by a patent examiner on whether to grant the application.

There are a variety of measures that could be taken to alleviate the problems I've described. They include: reducing the patent term for inventors in industries that do not have the peculiar characteristics of pharmaceuticals that I described; instituting a system of compulsory licensing of patented inventions; eliminating court trials including jury trials in patent cases by expanding the authority and procedures of the Patent and Trademark Office to make it the trier of patent cases, subject to limited appellate review in the courts; forbidding patent trolling by requiring the patentee to produce the patented invention within a specified period, or lose the patent; and (what is beginning) provide special training for federal judges who volunteer to preside over patent litigation.

I am not enough of an expert in patent law to come down flatly in favor of any of the reforms that I have listed. I wish merely to emphasize that there appear to be serious problems with our patent system, but almost certainly effective solutions as well, and that both the problems and the possible solutions merit greater attention than they are receiving.

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*This issue is separate from what is presented to a court in a patent case. Lawsuits are governed by existing law as interpreted by the Supreme Court and the U.S. Court of Appeals for the Federal Circuit, which has (under the Supreme Court) exclusive jurisdiction of appeals in patent cases.

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