
THE GRANTING of intellectual property rights, most notably through patents, helps spur innovation by providing potential inventors with the right incentives, making them secure in the knowledge that they can reap the benefits of their creations. Numerous recent studies, however, have concluded that the U.S. patent system is broken: overwhelmed by a rising caseload, it grants too many patents that are overbroad or that should never have been granted in the first place. Wrongly issued patents harm firms that wish to pursue legitimate business activities in the areas covered by the patents. The harm they cause is exacerbated by a legal doctrine that requires courts to grant patents a strong presumption of validity and thus enforce them even if there is good evidence that the patents never should have been issued in the first place.

In a discussion paper released by The Hamilton Project, Doug Lichtman of the University of Chicago Law School proposes reducing the current strong presumption of validity for patents unless firms fund a more rigorous review by the Patent Office or unless the patent has survived careful examination through another procedure. Lichtman argues that extending a strong presumption of validity only to patents that have been adequately reviewed, and making applicants pay the cost of that review, would reduce both the incentive to file undeserved applications and the harm caused by any undeserved applications that slip through.
The United States Patent and Trademark Office is tasked with reading patent applications and determining which qualify for patent protection. It is a Herculean task. One problem is resources: the Patent Office expects more than four hundred thousand new patent applications to be filed in 2007. To accurately evaluate the merits of each application would cost billions of dollars a year more than the Patent Office currently receives.

In evaluating patent applications, the Patent Office must contend not only with a limited budget, but also with limited information. Patent applications are evaluated early in the life of a claimed technology; thus, at the time of patent review, there is typically no publicly available information about, for example, how well the technology has been received by experts in the field or whether consumers have deemed the technology to represent, in some way, an advance over existing alternatives. Worse, patent examiners cannot solicit these sorts of outsider evaluations, not only because for many technologies it is unclear, at the early stages, who the relevant experts and customers might be, but also because patent evaluation is typically a confidential conversation between applicant and examiner, designed to keep an applicant’s work secret in case the patent application is ultimately denied.

Given all this, it is hardly a surprise that the Patent Office occasionally makes mistakes during the initial process of patent review, granting patents that, on the merits, should never have been issued. The real surprise is that these mistakes are so difficult to reverse.

Lichtman argues that the culprit is a legal doctrine known as the presumption of validity. Under that doctrine, courts are obligated to defer to the Patent Office’s initial determination that an invention qualifies for patent protection. As interpreted by courts, alleged infringers must bear a relatively heavy burden of proof in order to overcome the presumption of validity, thus making it difficult for courts to overrule the Patent Office even when it erroneously issues a patent. The theoretical justification for this interpretation is that patent examiners have expertise when it comes to questions of patent validity and thus, if patent examiners have decided that a given invention qualifies for protection, judges and juries should not second-guess the experts.

But the reality, according to Lichtman, is that Patent Office expertise is brought to bear under such poor conditions that any advantages associated with expertise are overwhelmed by the disadvantages associated with insufficient funding and inadequate outsider information. He contrasts that situation to court review, where adversarial interactions bring forward evidence and arguments, and where financial constraints are reduced because only a tiny fraction of all issued patents end up sufficiently valuable and contentious to warrant litigation. Thus, Lichtman argues, the presumption of validity backfires. Rather than protecting accurate initial decisions from later meddling, the presumption of validity precludes what would usually be valuable secondary
review. As a result, courts today regularly enforce patents that never should have been issued in the first place, and calculating applicants apply for undeserved patents in the hope that an overwhelmed Patent Office might err.

This is a substantial, real-world problem, observes Lichtman. Under normal circumstances, a patent holder earns a living first by patenting a genuine invention, and then by telling potential customers about the technology. The patent in this instance simply protects the inventor’s idea from being stolen while he tries to develop a market for it. The system thus encourages both the creation and dissemination of new ideas. Patents that are wrongly issued, by contrast, do not remotely follow this pattern. A patent holder whose patent covers a technology that was already obvious has a strong incentive to sit quietly after the patent is issued, knowing full well that other parties will stumble into that same obvious technology in time. When that happens, the patent holder can step forward, threaten litigation, and ultimately extract royalties from infringers who neither knew of nor benefited from the patent holder’s work. A growing numbers of “patent trolls” pursue this exact strategy, using patents on obvious inventions to tax legitimate business activity.

Perhaps the most obvious idea to improve the quality of patent examination is to increase Patent Office funding, making possible more rigorous up-front screening of patent applications. That would obviously help, but the drawback is that most of the money would end up being wasted, Lichtman says. After all, as Stanford Law Professor Mark Lemley pointed out years ago, most patents lie dormant after issuance. They will never be read, never be licensed, and never be asserted in negotiation or litigation. Money spent perfecting these documents is money thrown away.

Lichtman’s proposal, therefore, aims not to improve the quality of Patent Office review generally, but instead to change the presumption of validity such that it more accurately reflects the strengths and weaknesses of contemporary patent review. Specifically, he proposes three related reforms: First, the strong presumption of validity that applies today should be reduced, through a voluntary and explicit disclaimer made by the Patent Office, fresh court interpretations, or congressional action. With the presumption reduced, patent examiners would still play their customary role in terms of evaluating claim language and ensuring that applicants comply with the patent system’s many rules about the form and content of patent disclosures. Patent examiners would also continue to weed out the most egregious applications, and force inventors to commit up front to details about their claimed accomplishments, thereby limiting the risk that a patent holder will be able to alter strategic details during litigation. The only change at this stage would be that patent issuance would no longer represent a definitive ruling with respect to validity. Examiners would still document their reasons for allowance, and those reasons would certainly be considered by later decision makers, but there would be only a trivial presumption that the examiner’s validity analysis is correct. In addition, courts would be free to deem that presumption fully rebutted in cases where the evidence, on balance, suggests that patent protection was in fact improvidently granted.
Key Highlights

The Challenge

- The Patent Office has seen a surge in the number of patent applications filed, yet is constrained from being able to review them carefully by inadequate resources and information.

- As a result, the Patent Office is approving an increasing number of patents that are overbroad or that never should have been granted in the first place.

- Currently, a strong “presumption of validity” obligates courts to defer to the Patent Office’s initial determination that a patent is valid.

- The strong presumption of validity harms innovation by enabling holders of wrongly issued patents to extract royalties from alleged infringers—in effect, taxing legitimate business activity.

A New Approach

- Allow applicants to choose between the current system and funding a more rigorous review.

- Reduced fees would be available to smaller entities.

- A strong presumption of validity would be provided only to patents that survive the more intensive Patent Office review, or another similarly rigorous review, such as reexamination by the Patent Office or litigation before a court.

Second, and in essence to fill the hole created by the first reform, Lichtman argues that Congress should create a new opportunity for patent applicants to come to the Patent Office, to fund a vigorous review process, and to earn a significant presumption in favor of patent validity. In order to provide funding necessary to conduct these more-intense evaluations, the fees associated with the supplemental review would be higher than current fees. In addition to enabling a more rigorous review, these higher fees would discourage patent holders from too readily invoking the process. As is already the case today with respect to most other Patent Office procedures, reduced fees would be available to smaller entities. The more rigorous Patent Office review would be optional. Applicants who forgo the alternative review would still be able to defend their patents in court, should that need arise. Applicants who choose the more rigorous review, however, would enjoy more protection. Courts would be allowed to consider evidence that was not considered by the examiner at the time of this intense review, but courts would need to overcome a significant threshold before being allowed to second-guess the Patent Office’s evaluation of evidence that it had considered.

Third and finally, in addition to this proposed new form of Patent Office review, Lichtman notes that there are other procedures that result in reliable patent evaluation, and either the courts or Congress should make available a strong presumption of validity in those settings. For instance, when a court evaluates a patent in the context of litigation, that evaluation should be accorded deference in any later litigation involving the same patent. Similarly, when a challenger requests that the Patent Office reexamine an issued patent, the results of that intense look should be given presumptive weight in later judicial proceedings. If Congress adopts one of the many proposals that would create a new postgrant review process, decisions made as part of that more intense process, again, should be accorded defer-
ence by later decision makers. Lichtman proposes that deference in each of these instances should be calibrated to match the strengths and weaknesses of the relevant review. A more adversarial process, for instance, should be accorded greater deference, as should a more intensive review. The point is that reliable evaluative work is done in many settings, and a strong presumption of validity should attach to the findings of such work.

Potential Questions and Concerns

Despite its limitations, isn’t Patent Office review still likely to be more accurate than patent evaluation done by courts?

Lichtman’s proposal is not designed to shift decision-making power away from patent examiners toward judges or juries. Quite the opposite: he proposes a new “pay more–get more” examination process that would be based in the Patent Office, and he endorses Patent Office procedures in which some issued patents are returned to the Patent Office after issuance and are reevaluated through an adversarial process. While Patent Office examiners could make expert determinations about each patent application’s validity, in theory, Lichtman observes that they currently do not have enough time or information to review each applicant’s often-voluminous submissions, and that doing so would actually be an inefficient use of resources, since so few patents are ever litigated. To the extent that his proposal shifts some of the decision-making authority to the courts, he argues that this shift is still preferable to initial Patent Office review. Patent litigation is adversarial, it takes place later when more information is available, and it applies to few enough patents that significant resources can be devoted to hiring experts, searching previously patented inventions of relevance (known as prior art), and in other ways rigorously analyzing the merits of the case.

Would eliminating the strong presumption of validity reduce certainty about the patent’s validity and thus increase the risk for patent holders who invest in their products?

Lichtman recognizes that the current strong presumption can reduce uncertainty and thereby increase a patent holder’s incentive to invest in the development and commercialization of his patented technology. Yet Lichtman doubts that this alone can justify the presumption given how little weight certainty is accorded almost everywhere else in patent practice. For example, the legal rules under which patent claims are analyzed are constantly in flux and, moreover, create substantial uncertainty for patent holders because so much hinges on a patent’s first judicial review—a patent holder who successfully defends patent validity must start afresh when he sues a second infringer, while a patent holder whose patent is found invalid is barred from ever again enforcing the patent.

Would the more rigorous Patent Office review handicap individual inventors and smaller entities that cannot pay for rigorous review?

Lichtman proposes that the fee schedule offer a price break for smaller entities, in much the same way that the Patent Office currently offers a small-entity discount on the fees associated with filing a patent application. Moreover, he points out that almost any change to improve the quality of patent review will result in new costs to applicants: if patent examiners...
Applicants could earn a strong presumption through a voluntary “pay more-get more” review process, with a discounted fee for smaller inventors.

commit to spending twice as much time on each application during the normal review process, if patent law changes so as to require that applicants conduct their own searches for prior art before applying for patent protection, or if postgrant opposition procedures are created that require patent holders to hire lawyers to defend their patents. Against this backdrop, Lichtman argues that his proposal for reform is more attractive, on the margin, not simply because it would dampen any harm by reducing the fee for smaller entities, but, more importantly, because under his approach a cash-starved firm can choose not to participate in the new procedure, and can choose to pay for the presumption later (up to one year after issuance) if it discovers its product is commercially viable.

Would reducing the presumption of validity cause litigation to devolve into a wasteful search for obscure prior art?

Accused infringers spend exorbitant amounts of money searching for prior art that might disprove the originality of the asserted patent. Lichtman observes that any legal change that weakens the presumption of patent validity might amplify this incentive to search. After all, the lesser the presumption, the greater the likelihood that the infringer will be able to find a piece of prior art sufficient to invalidate the patent. While Lichtman recognizes this potential concern, he argues that the presumption is a poor solution to the problem of obscure art, and courts should instead continue to develop practical rules about how public a prior art reference must be before it will be deemed admissible as evidence against patent validity.

Effects on Current Stakeholders

Lichtman argues that the primary beneficiaries of his proposal would be the many firms which, in the course of introducing a product or service, might inadvertently infringe an overbroad or otherwise flawed patent. These firms need the patent system to exercise due care to ensure that only genuine inventions are awarded patent protection, because these firms are the ones who will end up paying royalties or in other ways having their businesses disrupted in the event that some obvious idea is nevertheless allowed to fall within a patent holder’s exclusive rights. Lichtman believes that holders of valid patents will support his proposed reform because it would offer better protection against patent trolls.

Those who might be disadvantaged, Lichtman writes, include firms that exploit today’s rules by suing on patents that never should have issued in the first place. A cottage industry has emerged to do exactly this, using the presumption of validity to turn wrongly issued patents into disruptive moneymakers. These patent trolls do not contribute in any way to innovation. They do not bring new ideas into public use directly, for instance by producing products, nor do they bring new ideas into public use through indirect means, for instance by introducing potential licensees to the patented technology. Instead, and against everything the patent system was supposed to encourage, these firms wait for their victims to develop independently the obvious “inventions” their patents cover, and then sue or threaten to sue in order to extract an unearned reward.
The presumption of validity is today recognized too readily, built into a “one-size-fits-all” patent system where every application by necessity is given a relatively sparse review. The result is an often counterproductive system where patents are wrongly issued and then are fiercely enforced. Lichtman’s proposal would recalibrate the presumption of validity to better account for the realities of patent review. The current strong presumption of validity would no longer apply to every issued patent. Instead, a strong presumption would have to be earned either by funding a more rigorous review by the Patent Office or by surviving some other intensive review process. The changes would reduce the incentive to file undeserved applications, and at the same time would reduce the harm caused by any undeserved application that might slip through.

CONCLUSION

This policy brief is based on the Hamilton Project discussion paper, Aligning Patent Presumptions with the Reality of Patent Review: A Proposal for Patent Reform, which was authored by:

DOUG LICHTMAN
Professor of Law, The University of Chicago
An Editor of the Journal of Law & Economics,
Doug Lichtman’s areas of expertise include patent, copyright, and trademark law; telecommunications regulation; information economics; and a variety of issues related to technology startups and the Internet.

Additional Hamilton Project Proposals

Additional Hamilton Project discussion papers and policy briefs can be found at www.hamiltonproject.org, including:

- **Promoting Opportunity and Growth through Science, Technology, and Innovation**
  Technological progress has accounted for a large and increasing share of U.S. economic growth. The Hamilton Project’s strategy calls for strong new policies in the areas of education, research and development, and intellectual property.

- **Investing in the Best and Brightest: Increased Fellowship Support for American Scientists and Engineers**
  In order to increase the number of scientists and engineers in the U.S., this proposal calls for tripling the number of awards granted by the NSF Graduate Research Fellowship program, which has a proven history of increasing enrollment in science and engineering graduate programs.

- **Prizes for Technological Innovation**
  Because the federal government now funds scientific research primarily through grants or contracts, it must choose both the researchers and the research approaches that it wants to support. Prizes would allow the government to set goals without determining the best person or method for reaching those goals.
The Hamilton Project seeks to advance America’s promise of opportunity, prosperity, and growth. The Project’s economic strategy reflects a judgment that long-term prosperity is best achieved by making economic growth broad-based, by enhancing individual economic security, and by embracing a role for effective government in making needed public investments. Our strategy—strikingly different from the theories driving current economic policy—calls for fiscal discipline and for increased public investment in key growth-enhancing areas. The Project will put forward innovative policy ideas from leading economic thinkers throughout the United States—ideas based on experience and evidence, not ideology and doctrine—to introduce new, sometimes controversial, policy options into the national debate with the goal of improving our country’s economic policy.

The Project is named after Alexander Hamilton, the nation’s first treasury secretary, who laid the foundation for the modern American economy. Consistent with the guiding principles of the Project, Hamilton stood for sound fiscal policy, believed that broad-based opportunity for advancement would drive American economic growth, and recognized that “prudent aids and encouragements on the part of government” are necessary to enhance and guide market forces.