

Post-Grant Review—Our Next Nightmare? VC Perspective

Calls for patent reform have been part of the national dialogue for several years now; yet astoundingly there is no meaningful data on the potential economic impact of proposed legislative reforms. Since the start of the recession, the U.S. Government has pumped almost a trillion dollars into stimulus and recovery packages of one form or another. If job creation is Congress's top priority, shouldn't U.S. lawmakers pause to assess the economic consequences of legislation that will profoundly affect America's most reliable stimulant of job growth, namely investments in innovation?

The innovation economy of the United States is the envy of the world. Our venture capital industry accounts for more than 85% of the world's venture capital. In 2008, venture capital-backed companies employed more than 12 million people and generated nearly \$3 trillion in revenue. Respectively, these figures accounted for 11% of private sector employment and represented the equivalent of 21% of U.S. GDP during that same year. Venture-backed companies outperformed the overall economy in terms of creating jobs and growing revenue and venture capital continues to grow entire new industries nearly from scratch. In recent decades, venture capital has played an instrumental role in creating high-tech, high-growth industries such as information technology, biotechnology, semiconductors, online retailing, and most recently, clean technology.

From my vantage point, nothing in the House and Senate patent leg-

islation will stimulate investments in innovative startups and several of the proposed changes, including a much-expanded post-grant review system, will make these investments far riskier and potentially untenable for venture capitalists. One of the first questions our firm considers in deciding whether to invest in a company is whether its business plan is backed by valid, enforceable patent rights. Strong, reliable patents are what enable a nascent innovative company to create meaningful value by competing in large markets that would otherwise be inaccessible because of the existence of established companies with far greater resources. If the prognosis for validity is weak or highly unpredictable and the costs and timeline for obtaining clarity are equally uncertain and potentially significant, the risks associated with that investment skyrocket, no matter how attractive the idea. Our business is built on high risk investments, but we need predictability of the cost and timeline of obtaining undisputed patent rights to justify and manage that risk.

Other articles in this issue will examine the broader legislative package; my objective is to highlight one particular issue that has largely gone unaddressed in the current debate: the impact of the proposed post-grant review ("PGR") amendment on venture capital investment in early stage innovation. It is worth mentioning at the outset that the Senate Judiciary Committee recently announced several notable improvements to its PGR amendment, which are

designed to reduce the cost and burden of defending validity challenges. Nevertheless, the House Judiciary Committee appears committed to its PGR framework, which has the backing of several big tech manufacturers. Which side will prevail is anyone's guess. However, because the House PGR amendment poses the greatest danger to early stage innovators, I will assume a worst case scenario in which the House PGR amendment becomes law.

Consider the structure of the House PGR system:

- 3 administrative tracks of post-grant review
- a negligible barrier to entry
- in 2 of the 3 tracks, a mini-trial in which the patent can be attacked on both prior art and discovery-intensive non prior art grounds
- no presumption that the patent is valid
- a much lower burden of proof than would apply to court validity challenges
- no meaningful estoppel bar against successive (or even parallel) challenges throughout the patent's life

The system is clearly designed to knock out patents; it will, as a result, knock out small innovators, often before conception. An issued patent, having survived a lengthy pre-grant examination process that already truncates the patent's useful life, will be treated as having dubious validity throughout its remaining life. The cost of defending and enforcing a patent will increase significantly and the odds of prevailing will diminish. For small entrepreneurs, who already

confront a day-to-day race against insolvency, the cost of patent ownership may well prove prohibitive and the benefits uncertain and unpredictable.

The unpredictability of patent rights will have a profound and immediate impact on access to venture capital. Nothing chills the investment process more than unpredictability. We see ample evidence of this dynamic in today's volatile economy. The entrepreneurial sector is acutely sensitive to changes that further destabilize an already high risk environment. Startups typically require several rounds of venture capital funding with each round designed to carry the company to meaningful milestones over an 18 to 36 month period. For each new round, the goal is to add additional investors to the syndicate. Investors expect a return for investing earlier, so they select milestones that they believe will make new investors willing to pay a higher price for the stock. Failure to achieve milestones usually results in flat or even lowers prices.

Given the increased likelihood of validity challenges, venture capitalists will have to reconsider the adequacy of each round and whether PGR challenges could emerge that would divert resources away from the lab bench and product development to patent defense, making the achievement of the milestones unlikely or impossible. Furthermore, even under today's system, a challenge to the validity of a key patent can scare off potential new investors, forcing a small company to rely solely on existing investors who may lack the resources to fund the next stage of development. If the system is altered to encourage multiple validity challenges throughout

the patent's life, startups will have a tough time attracting an initial round of financing, let alone the many subsequent rounds needed to complete the development process. The most innovative companies with the most patent filings will face the most uncertainty about their risks and capital requirements because of the compounding effect of multiple potential challenges.

Under the existing *inter partes* review system, which is limited to patents issued in the last decade, a validity challenge can take several years to complete, making it all but impossible to enforce the patent for much of its useful life. The House bill would do nothing to address the resource constraints that have led to this administrative logjam; instead, it would exacerbate the problem by opening *inter partes* reexamination to all patents and strip away estoppel protections that have discouraged abusive and serial challenges. Given the USPTO's state of fiscal crisis, it seems inconceivable that the Office will have the resources to administer this and a new system of post-grant opposition without adding to growing pre-grant and post-grant backlogs.

Because of the excessive delays now associated with *inter partes* proceedings, the current reexamination system is widely used by defense counsel to stall or discourage infringement litigation. Once the system is stripped of any meaningful bar against successive court challenges, large competitors and infringers will have every incentive to use post-grant review as a tactical weapon to preempt the enforcement of a patent, whether in court or at the negotiating table. Even after losing at the USPTO, a large company will have

a strong business case to pursue a subsequent court challenge against a small venture if doing so will jeopardize the small firm's existence or competitive capability by draining their coffers or cutting off their access to new investors. Factor in the prevalence of joint defense strategies, in which several large companies cooperate against a patent owner, and the potential threat of validity challenges multiplies exponentially. The net result is a post-grant review system that drastically diminishes the viability of young entrepreneurial companies through increased risk, cost and prolonged uncertainty.

The House PGR amendment reflects a troubling unawareness of how early stage innovation evolves into viable technologies and businesses, and the central role of a strong, reliable patent system. Contrary to the troll rhetoric, the vast majority of small innovative firms do not use patents to extort windfall payments from large manufacturers. Instead, patents allow small companies, many of which emerge from and partner with university research programs, to make effective use of inventions that otherwise would never see the light of day. For startups, a patent on a key technology gives investors a necessary degree of confidence that new discoveries can be protected, and a competitive position maintained, throughout a lengthy development process. And if the development process ultimately yields a marketable technology, the patent facilitates licensing arrangements, acquisitions and other strategic alliances that ensure a meaningful return on investment. This so-called virtuous cycle of innovation functions only if investors have confidence in the validity and predictability

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of patent rights. If that confidence is shaken through ill-conceived policy changes, the entire system will founder to the detriment of America's innovative economy.

Of course, mine is only one perspective among a broad cross-section of players that make up our innovation economy. The deep disagreements that have stalled passage of a patent bill are indicative that not all sectors of our economy perceive or use patents in the same way. If I were a large consumer electronics manufacturer, I would likely view the patent system quite differently. Patents would largely impact the liability column of my balance sheet, and I would perceive small patent owners as an unwelcome threat to a business model built on tight margins, the aggregation of hundreds if not thousands of component technologies, and very short product and market cycles. If I were to ask my attorney how to reduce the risk and cost of patent-driven licensing fees, settlements and damages, her answer would no doubt reflect much of what we see in the House patent bill.

However, the fact that the House bill picks sides among users of the patent system is a fatal flaw that reflects a broader failure to take seriously (or even consider) the direct and positive correlation between strong patents, private capital investments in entrepreneurial innovation, economic leadership in groundbreaking technologies, and job growth. Too much of the commentary on patent reform legislation has adopted the perspective of the big tech manufacturer, with apparent disregard for the perspective of small innovators or the potential costs of weakening U.S. patent rights. We have been treated to

endless rhetoric about sky high patent litigation costs, unscrupulous patent "trolls," seemingly absurd peanut butter sandwich patents, and a "broken" patent system. However, competing views, particularly those of small innovators, have been largely ignored or marginalized.

The castigation of small, non-manufacturing patent owners as "trolls" is one of the most troubling aspects of the legislative debate. Small firm patents are, on average, more valuable than those of large manufacturers, and small firm innovation is more likely to yield revolutionary technological advances, as opposed to incremental changes to existing products. Small firms are also more dependent on patent rights to attract private capital funding, collaborate with strategic partners and secure licensing fees (or a larger acquirer) once the technology is proven and marketable. Importantly, small firms are also the principal driver of new job growth, and yet there is no hard data on the macroeconomic impact of post-grant review on innovative startups.

The idea of establishing a European style post-grant opposition system at the USPTO took root in the early part of the last decade when the new *inter partes* reexamination system was failing to attract the expected volume of challenges. Instead of giving the reexamination system a chance to gain acceptance, which it has in recent years, the USPTO, National Academy of Science and Federal Trade Commission in 2003 and 2004 led a collective call for an entirely new system that would permit a mini-trial at the USPTO. The calls became louder amid concerns that the USPTO had, during the dot-com boom, issued

thousands of questionable patents that were now being asserted against big tech manufacturers. The answer, claimed advocates of patent reform, was to make it easier to knock out patents administratively. There was no credible empirical data to confirm the existence of a patent quality or litigation crisis and there never has been. Nor was there any consideration of the economic impact of a much expanded post-grant review system on the vast majority of meritorious patents that drive private investments in disruptive technologies. Instead, the calls for an inflated post-grant review system and patent reform generally were built on a shaky foundation of questionable premises that have proven specious over time. Significantly, other countries that have experimented with multiple administrative systems for challenging a patent have abandoned this approach in favor of a single track process concluding that overlapping systems lead to harassment, uncertain patent rights and government waste.

As a venture capitalist on the front line of early stage technological development, I fear that Congress is poised to do serious damage to a patent system that, albeit imperfect, does a better job of encouraging private capital investments in innovative startups than any other in the world. Although the Senate PGR amendment is far from ideal—for example, it too contemplates a 3-track system—it at least includes a number of safeguards to limit frivolous and duplicate validity challenges. The House amendment, in contrast, will drive a stake in the heart of early stage innovators and ultimately jeopardize America's ability to create new jobs. ■