

**House Small Business Committee Hearing
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Patent Reform
Impact on Small Venture-backed Companies**

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Chairwoman Velazquez, Ranking Member Chabot and Members of the Committee, my name is John Neis and I am a managing director at Venture Investors, an early stage venture capital firm based in Madison, Wisconsin. I am also a member of the National Venture Capital Association (NVCA) based in Arlington Virginia. It's my privilege to be here today and to have the opportunity to share my views and the views of the venture capital community on the patent system and the opportunity for reform.

My partners and I have worked together for over two decades to identify, finance, and assist seed and early-stage entrepreneurial and innovative companies, primarily in the mid-west. We have a team of seven partners, each focusing on certain industry sectors. I am part of the team that operates largely in the biotechnology and medical device spaces classified as life sciences but many of our intellectual property challenges are shared by my other partners who are investing in information technology and alternative energy. Our investment strategy is to identify and commercialize industry-leading technologies, developed by some of our nation's top scientists and research institutions.

Venture Capital Investment is A Vital Ingredient for Innovation

The National Venture Capital Association, of which I am a member, represents the interests of more than 480 venture capital firms in the United States, which collectively account for more than 85% of global venture capital investment. Venture capitalists invest in small, emerging growth companies that strive to commercialize innovation and bring cutting edge technologies to the market in an efficient manner. In doing so, venture capitalists have built companies that accounted for 10 million jobs or 9 percent

of private sector employment and \$2.1 trillion in revenues or 17 percent of US GDP in 2005.¹ Companies that received their start with venture capital dollars include: Genentech, Amgen, Intel, Cisco, Google, Medtronic, Microsoft, and eBay. At one time, all of these market leaders were small companies with big ideas.

Venture capitalists invest in these types of small companies across all industry sectors but we have a particular interest in information technology, communications, and life sciences. Within the last year, the industry has begun to explore investment in alternative energy, a sector that shows tremendous promise for innovation going forward. In addition to providing early stage funding to young businesses, venture capitalists also take an active role in guiding nascent companies through their start-up and expansion phases and accordingly have a unique perspective on the hurdles that emerging businesses confront and the environments that promote or stifle growth and innovation.

Given this role that we play across a diverse set of industries and at various points in a company's life cycle, venture capitalists have the unique opportunity to observe the impact of patent system changes across a broad range of companies. The implications are complex, and differ among stakeholders depending upon the size of the company, the industry dynamics, and the competition within the overall ecosystem. While we all agree that there are abuses of the patent system and improvements could and should be made, we believe it is absolutely critical that any reform proposals are thoroughly vetted by legislators who are fully apprised of the consequences associated with each change to the system. There are already examples of reform proposals that, at first glance, appear to be reasonable but could be unintentionally devastating for small venture backed companies at a critical time in their existence. In making any effort towards meaningful reform, we want to avoid exchanging one set of problems for another.

¹ See Global Insight, *Venture Impact: The Economic Impact of Venture Capital Backed Companies to the US Economy* (2007).

Small Companies Need Protection

The complexity of reform does not elude us. As we considered aspects of legislation previously proposed, we found ourselves at odds with stakeholder groups with which we are so often aligned. One particular dichotomy we saw was between what software and life science investors need from reform efforts. However, as we engaged in the reform process further, we discovered that there is an equally important dichotomy between large and small companies, which will be the focus of my comments today. **At the center of our concerns lies the fact that the cost of defending against infringement is disproportionately burdensome for the small venture backed company while the benefit of infringing relative to the cost is disproportionately attractive to a large company.** This Committee is particularly aware that small business is the economic backbone of this country. It is where the overwhelming majority of job growth and innovation occurs. We must be certain not to tilt the playing field further against the interests of these smaller growth engines.

Our young, emerging companies are disadvantaged relative to the larger Goliaths in so many ways – sales and marketing presence, service and support, ability to bundle ancillary products, customer confidence – that often the only competitive advantage they possess is the sustainability of their intellectual property. And our companies need the ability to defend themselves when their patents are willfully infringed.

If the Goliaths can simply obtain a license under reasonable terms, this, combined with all their other advantages, would enable them to crush our companies in the market. If our companies believe that they can create more market value by becoming a meaningful competitor rather than a licensing house, they should have the right to make that strategic decision and have access to the tools to defend their intellectual property. Yet, certain proposals, while well intentioned, erode the ability of small companies to defend their patents at a cost that is devastating to their ongoing viability. Our companies may still win the litigation battle but, given the deep pockets of these Goliaths, lose the marketplace war while the battle is being fought.

I would like to provide several examples of these types of unintended consequences.

Post-Grant Opposition Threatens to Create Harmful Uncertainty

The goal of post-grant opposition --invalidating flawed patents – is a noble one and is one that we share. The reexamination process was originally intended as a mechanism to achieve this goal, and recent improvements have aided its effectiveness. However, we have concerns about the infinite uncertainty and substantial costs a post-grant opposition process would create for small company patent holders and their investors. Those concerns are compounded by the prospect of an already overburdened Patent & Trademark Office taking on yet another complex review process.

Adding an open-ended second process -- rather than fixing the process that is supposed to function earlier in the patent application cycle -- weakens the presumption of validity of a patent, thereby increasing the risk for a venture backed company. As a venture capitalist, when making investment decisions we must measure these risks accordingly and would be less likely to fund an innovation that could be endlessly challenged, regardless of how frivolous that challenge may be. This uncertainty would be extended with the addition of a "second window". A company that has a valuable and legitimate patent may not be able to get venture funding if that patent is going to be challenged again and again. Such challenges distract management – at a time when they should be focused on building the company.

Secondly, patents are often granted to venture backed companies early in their development when they have limited financial resources to fight these oppositions. Under this new regime, a patent applicant, who has already paid for an examination and received a patent grant, must now incur the cost of defending it against any deep pocketed party who wants to challenge it. The post-grant review clearly favors large companies who would be in a position to use these proceedings to delay patent issuances to venture backed companies, whose survival would be vulnerable to such delays. Essentially, it provides the infringer the opportunity to become the plaintiff. Clearly this scenario would favor a large corporation over a thinly capitalized, early stage company.

If a post-grant opposition procedure is to be adopted, it should allow only a single window with a short, predictable duration of approximately six months. Petitioners for cancellation should be required to identify themselves and should be required to file all issues regarding patentability known to the petitioner and all material information known that supports its argument of unpatentability. The request by the petitioner should be required to provide specific reasons as to why they are seeking the cancellation and provide the evidence that supports the request. If a party elects to challenge a patent issuance through this process, they should not be permitted to again raise these or other issues that they had knowledge of at that time in any subsequent proceeding before the PTO or a court. If you are going to create a new process that imposes additional cost, time, and distraction before certainty of patent issuance, these steps would at least protect the patentee from having to repeatedly defend the patent based on the same arguments.

Current Calculation of Damages is Appropriate and Working

One area that we feel does not need reforming is the calculation of damages. The current system, in which the full impact of a patented feature on a product is considered, is an appropriate one. For decades, courts have refined damages calculations to properly reflect the value of patented components. The system works. Courts are familiar with the concept of "whole market value" and "causation" as well as "convoys sales." Patentees have never been systematically overcompensated, nor are they currently.

The apportionment of damages proposal, which limits damages to only the patented feature does not recognize that in a competitive environment, the sale of a whole product is often dependent upon the presence of a patented improvement. For example, the damage apportionment concept is particularly troubling to medical device companies whose discrete improvements to a product may shift the sale of the entire system to the inventor of that improvement. This shift occurred in the case of the addition of 'motion tolerance' to pulse oximeter systems and, to some extent, when 'rapid exchange' capability was added to angioplasty balloons.

Arbitrarily denying courts the ability to base computations on the entire market value of a product will lead to equally arbitrary results as judges grope for the hypothetical price of an unsold feature. Consideration of a non-exclusive license to make the determination is just as unacceptable because it is effectively using a standard of compulsory licensing as a measure for damages when a company may need to maintain exclusive control for strategic reasons. This is an area of reform that is best left alone.

Prior- User Rights Would Promote Trade Secrets and Slow Innovation

The concept of prior-user rights is tantamount to compulsory licensing without compensation. Its adoption and especially the defense extending to "substantial preparation for commercial use" is an invitation to bad behavior and therefore to greater dispute and increase in the cost, duration and complexity of patent infringement litigation.

The patent system works by giving an inventor a temporary exclusive right to use or license to others the invention in exchange for publishing the invention so that others can learn from it. Currently, entities that suppress, conceal, or abandon a scientific advance are not entitled to patents or other intellectual property rights. It is the sharing of a trade secret that earns a property right.

The most common rationale offered for prior-user rights is that because of the costs of patent protection, U.S. companies must choose carefully what they patent because it is impractical to patent every minor innovation in a product or process. Advocates often raise the specter that a company that neglects to patent some small change in an important product could be prevented from using the innovation if someone later patented the idea. However, companies don't have to file patents on every minor invention in order to protect themselves. If something is of marginal value, all companies have to do is publish it. Then it can't be patented and used against them. It is understandable that many lawyers for large corporations might covet prior-user rights. But prior-user rights gut the core concepts of the U.S. patent system, because they slow

the dissemination of knowledge by promoting the use of trade secrets and destroy the exclusivity that allows new players to attract startup financing.

Prior-user rights would harm small business startups as it would add the threat that after taking the sizable risks of R&D and market testing, a company could face the prospect of a market Goliath suddenly following up with a no-royalty product. Moreover, the litigation costs of challenging the validity of prior-user rights will favor those with deep pockets.

Venue Proposals Should Address Speed of Resolution

While litigation outcome is important, speed of resolution is often equally or more important. It is often difficult for a portfolio company to get customer traction in the market when engaged in litigation, especially if faced with tough competition from the infringer during the litigation. Further, litigation can block or discount values at financing events, initial public offerings, or acquisitions. Small companies deserve the right to speedy resolution.

Most of my portfolio companies are based in the Western District of Wisconsin, a noted "rocket docket" where litigation outcomes are often known within a year of filing. Reform to venue shopping probably won't hurt my portfolio companies because this is likely to be one of their available venues. Many of my venture capital colleagues may not be so fortunate. I was an investor in another portfolio company engaged in litigation in the Northern District of California and it took nearly a decade to resolve the case. A large foe was trying to bleed our company into bankruptcy, and for a large company, these victories by attrition are all too often a reality.

Clearly a system under which high rates of judgments by a particular court are overturned should be modified. However, constraints on venue shopping shouldn't limit the ability to find a venue where the cloud of uncertainty can be removed in a reasonable time frame. Reform provisions should provide some flexibility, while

retaining the ability to seek another venue if there is evidence that it may be difficult to obtain a timely ruling.

Strong Deterrents for Bad Behavior Must Remain

Many of the reforms considered over the last year have focused on rebalancing the incentives once two parties have entered litigation. As I stated earlier, some reform is clearly necessary and appropriate in this area. However, as a small venture capital fund with a history of successfully backing early stage companies that have gone head to head with some very large public companies, we can attest that fundamental aspects of the litigation system such as the twin threats of treble damages and injunctive relief are essential protective shields for young companies and vital to investing in these kinds of deals. Those tools are purposefully severe and must remain so in order to insure the cost of infringement is a true deterrent for a large entrenched competitor rather than a mere cost of doing business.

We hope that Congress will tread very carefully in this area and avoid changes that could make a large company that is unable to obtain a license decide to simply infringe to effectively get, at worst, an involuntary grant of a license while simultaneously saddling their cash strapped, undermanned venture capital backed competitor with an expensive distraction. This is an invitation for increased incidents of willful infringement that greatly increases the risk and cost of investing in innovative young companies.

Small Company Resources Are Best Directed at Innovation, Not Litigation

Fundamentally, I believe that we all seek the same outcome: reforms that strengthen patent quality while decreasing the incentives to engage in frivolous litigation that drive up costs at the back end of the patent process. For small, venture backed companies, the critical component to achieving that outcome is doing so in a manner that eliminates ambiguity about patent validity as quickly as possible, and in a manner that avoids unnecessary costs.

What is easily lost in the technical jargon and sparring that has so far surrounded the patent reform debate is the fact that small businesses – particularly small, venture backed companies – are actually small. Many of the companies supported by my firm have fewer than 20 employees in the first few years of their existence. Lawyers – whether they are helping to file patents or simply helping to establish sound corporate governance practices at a nascent firm – charge as much as \$600/hour for their time and expertise. A freshly minted PhD – often critical to the company's path to success - makes the equivalent of \$60/hour or less. While I have nothing against lawyers, only the investment in the PhD is going to help my companies grow to become the next Google, the next Intel, or the next Genentech.

As the pace of technological development in traditional high-tech spaces has advanced and as drug development costs have skyrocketed, large entrenched companies have increasingly employed an acquisition strategy to keep their development pipelines full. As the backers of many of the leading-edge companies breaking into new markets, venture capitalists and their portfolio companies have benefited from this acquisition quest. Given this trend, from the venture capitalists' perspective, money spent by Google, Intel or Roche in frivolous patent litigation is not only a drag on the US economy – it is money that could be better spent acquiring young companies that are moving technology in new directions. Yet reforms that force those young companies to spend their scarce dollars on JDs rather than PhDs in order to defend their technology against those same companies are equally absurd. The capitalist marketplace is already a Darwinian environment where only the toughest and best young companies can force the large combatants to make room for their existence. The patent system should not unfairly change the odds of the bet.

The Road Ahead Should be Focused on Quality

With that framework in mind, what are the steps that can be taken to improve the patent system as a whole?

Most in the venture community would agree that part of the problem in getting quality patents out of the system has been the lack of information available to patent examiners

– or, put another way, the inputs available within the system. Efforts at litigation reform will ultimately fail if we do not address the fundamental problem of ensuring only truly novel and non-obvious patents are issued. And, while we support increasing funding for the PTO generally as well as providing better compensation to attract more examiners, those steps alone are not sufficient. Throwing more money at the same system is never a winning solution. We hope that Congressional reform efforts will address these points.

When venture capitalists encounter such systemic problems with our portfolio companies, we throw out the business plan and write a new one. We are encouraged by reports that the PTO may be taking a step in that direction. Reported plans to use the power of the Internet to access technical experts is a radical idea that can creatively offer a way to balance the information disadvantage that patent examiners face. While this is only a pilot project and may encounter unexpected difficulties, we feel it is a step that could offer tremendous promise and would offer our support to explore the concept.

Conclusion

The U.S. must continue to be the leader among all nations in promoting and insisting on sound, strong, and consistent intellectual property protections for those who need it most. Congress must act to address the pressing need for updated revisions and improvements to our patent system but should do so carefully and thoughtfully. Finding common ground among the many divergent groups involved in the patent debate will be a difficult task. But by insisting that all interested parties participate in the process, the goal of reaching a fair and reasonable reform for all parties will more likely be met. Improving the quality of the patent system and the patents that it produces is critical to our nation's innovation leadership. However, so is protecting the smallest of companies that have contributed so substantially to that leadership. Thank you for the opportunity to share these thoughts with you.