Executive Summary

Lawmakers are contemplating making changes to patent law and procedure to curb abusive litigation and demand practices. One of the most important constituents for them to keep in mind is small, innovative companies. The impact of the patent system on startups, and in particular high-tech startups, is crucial because they are a key source of new jobs and innovation. According to Engine and the Kauffman Foundation, "Though they start lean, new high-tech companies grow rapidly in the early years, adding thousands of jobs along the way."

Startups also have a unique perspective on patent assertion, with the potential to be helped as well as harmed by entities that assert patents as a business, referred to in this report interchangeably as patent assertion entities (PAEs) and non-practicing entities (NPEs).² Companies with less than \$10M in revenue comprise 55% of unique defendants to PAE suits. Startups, with their slim margins, focused operations, and high rates of innovation, can arguably least afford to engage in expensive litigation to defend against patent claims or stop incumbents from copying their innovations. But they can also gain from being able to monetize their patents through NPEs.³

The first part of this report describes the experiences of startups with patent assertion based on surveys of about 300 venture capitalists and venture-backed startups conducted in 2013. It also reports on companion surveys of patent litigators and large-company patent counsel in 2013, and a non-random, non-representative survey of startups conducted in 2012 for a total of over 1,100 respondents. Due to the difficulty of reaching a representative population, these results are not generalizable to all start-ups and startup investors, but instead serve as a window into their experiences and views. The second part of the report describes existing and potential legislative, judicial, and market-based responses and recommends how they may be tailored to better meet the needs of startups and resource-poor companies.

According to survey responses, patents for novel inventions play a generally positive and at times crucial role for startups. They help to transfer technology, enable investment, and improve exits, particularly in bio/pharma industries. But patent assertions by NPEs, which at times hit startups when they are least able to fight them—on the eve of a funding or acquisition event, or, 40% of the time, in the context of the startups' customers—can have significant and at times devastating impacts on companies. Though partnering with NPEs to monetize patents can be beneficial to companies as well, the benefits do not appear to offset the harms, according to survey responses and VC interviewees whose companies had been sold to and been sued by NPEs.4 Furthermore, many survey respondents do not find these to be socially productive assertions—but rather on the basis of patents that, though they may be valid, are viewed as frivolous or overbroad.

Though the risks associated with patents were described as feeling "unbounded," startups are routinely expected to absorb these risks in their dealings with acquirers, investors, and customers. Overall, these assertions have added friction to technology transactions, reduced the value of pursued startups, and triggered large indemnities, according to study subjects.

More specifically, we found:

Finding 1: Based on survey responses, 75% of surveyed venture capitalists (VCs) and 20% of venture-backed startups with patent experience have been impacted by an NPE demand; nearly 90% of all tech VCs have been impacted. The demand was based on the startup's adoption of another's technology 40% of the time. Low quality and software patents were identified as problematic.

Finding 2: Although NPE assertions are perceived as motivated primarily by money, respondents reported routinely experiencing non-financial consequences including delays in hiring, meeting milestones, and business line pivots and exits.

Finding 3: Most VC respondents believe patents are important for innovation. An estimated 5% of startups have sold their patents to NPEs, experiencing positive benefits from doing so. However, most surveyed VCs, including the small number whose companies have sold to NPEs, believe that NPEs are harmful for innovation.

Finding 4: Startup concerns with patent enforcement go beyond NPEs and extend to the disadvantages startups suffer relative to larger incumbents as a result of poor patent quality, high costs, and delays associated with the patent system, survey respondents told us. The inability of startups to defend their own patents and suits brought by "patent predators," larger companies that sue with anti-competitive motives, also presented specific concerns.

To ameliorate the harms of patent assertion on small companies, we recommend several interventions, keeping in mind the special needs of startups, who, with their fewer resources, less time, and greater focus on building the business, are at a relative disadvantage when patent processes are expensive, slow, or require deep patent expertise (or "patent game"-playing skills). These include:

Recommendation 1: Fully fund the PTO and its quality initiatives including tightening functional claiming and expand low-cost access to the PTO's transitional program and other forms of post-grant review by reducing fees for small and micro entities and supporting and prioritizing collaborative challenges to patents asserted against large numbers of defendants, particularly by downstream users and small entities.

Recommendation 2: Make patent cases about the merits, not about who can outlast or outspend the other side, by permitting more discretion in awarding fees and costs for non-core discovery and promoting uniformity and early dispositive rulings, for example by requiring the Patent Pilot Program to implement and measure the impact of best practices.

Recommendation 3: Make patent risks more manageable for startups by requiring demand letters and complaints to disclose the real-party in interest, claim charts, related litigations and reviews, and licenses that could cover the target.

Recommendation 4: Make startups less attractive targets by limiting the liability of downstream users and the precedential value of the settlements signed by small companies.

The report concludes with a section that covers existing private and civil sector responses and tactics to help small companies in their own dealings with patent assertions, based on extensive research and interviews with defense service providers and experts in dealing with and bringing patent assertions against small companies. Appendix C-1 contains a listing of 17 defense service providers, their offerings, target client profile, and how to engage them. Appendix C-2 describes and provides examples of a variety of different tactics for defending against an NPE demand, including "fighting back," "laying low," and publicity, as well as comments on their effectiveness by experienced in-house, company, and public interest lawyers.

Finally, we include the stories and advice of five individuals—two investors, two startup executives, and one public interest lawyer—who have experienced patent litigation first-hand. Their responses to assertion are varied—one found a market-based solution—"partnering with a troll," others saw their companies devalued and decimated by assertions, and another presents the perspective of his clients who cannot afford to use any of the patent system's protection mechanisms. Through them, the judges and policymakers that form the patent system can get a glimpse of how the patent system is being experienced in the world, and how it may be improved.