SMEs And Patents In The United States

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Executive Summary

Within the U.S. economy, many small and medium-sized enterprises (SMEs) are intensely aware of the need to protect intellectual property (IP) and to incorporate IP strategy into their business growth and development plans. Due to the expense, complexities, and laborious process, unfortunately, many SMEs do not effectively build out a baseline IP strategy early enough. With the rise of global competition and a more interconnected economy, IP rights are critical assets for SMEs to compete effectively.

The good news is there are many resources across the innovation ecosystem to support SMEs, enhance IP awareness and foster innovation. From incubators, accelerators, venture capitalists (VCs), and the United States Patent and Trademark Office (USPTO), SMEs have access to mechanisms to effectively participate in the IP economy, thereby enabling sustained growth and long-term investment in R&D.

SMEs Need to Be Aware of the Importance of Patents and More Broadly of IP

Patents were early recognized as such a significant part of the nation's economic landscape that the power to grant them was enshrined in the U.S. Constitution. During the over 225 year history of a patent system in the United States, their importance has steadily grown in the world economy. In fact, *the Intellectual Property and the U.S. Economy: 2016 Update* report demonstrates "that IP-intensive industries supported 45.5 million jobs and contributed $6.6 trillion in value added in 2014, equivalent to 38.2 percent of U.S. GDP. In addition, the current report reinforces the earlier finding that IP use permeates all aspects of the economy with increasing intensity and extends to all parts of the U.S."[1] Often, securing patent rights are considered a hallmark of success. Further, the success of broad cultural influencers, such as the television show Shark Tank, have served to underscore the essential nature of protecting one's intellectual property when starting a new business and the important role patents play in securing the venture capital needed to commercialize an invention.

A recent United States Patent and Trademark Office Economic Working Paper, *The Bright Side of Patents*, bridges the gap between the large cultural assumptions listed above and solid statistical evidence that supports these assumptions. The paper suggests:

> "Our analysis shows that patent approvals have a substantial and long-lasting impact on start-ups: firms that receive their first patent create more jobs, enjoy higher sales growth, innovate more, and are more likely to go public or be acquired. These positive effects of patent rights appear to be due to their role in facilitating start-ups' access to capital which helps them turn ideas into products and products into revenues. Our findings further suggest that the facilitating role of patents is strongest for early-stage firms, for start-ups founded by inexperienced entrepreneurs, and for firms in the IT sector. Thus, we conclude that patent rights help overcome information frictions between start-ups and financiers."[2]

The USPTO, now with its expanded reach through its regional offices, works closely with trade organizations, industry groups, and inventor associations to focus on educating small businesses and start-ups on the potential advantages and pitfalls of pursuing, or choosing not to pursue, an IP strategy as a significant part of their business development and strategy. For instance, the United Inventors Association of America (UIA) recently coordinated the Inventors Spotlight pavilion at the National Hardware Show which took place from May 9–11 in Las Vegas, Nevada. The Inventors Spotlight afforded start-ups and small businesses emerging in the marketplace the opportunity to showcase their products alongside established exhibitors at the show. The UIA also hosted an educational forum focused on helping start-ups and small businesses succeed in commercializing their ideas. The USPTO participated extensively at the Inventors Spotlight through hands-on IP

1. *https://www.uspto.gov/sites/default/files/documents/IPandtheUSEconomySept2016.pdf*, 30.

2. Ibid.

assistance and information sessions highlighting USPTO resources designed to help innovators and SMEs.

Private sector views about the propensity to file patents differ by industry. Pharmaceutical and biotech SMEs are generally more IP savvy and thus prone to file patent applications in earlier stages of development than similarly sized software based companies. Another factor in the awareness of patents is the general knowledge of the executive management team. For instance, a CEO who had direct exposure in his or her career with patent litigation will emphasize the need for patent protection, which will result in enhanced IP awareness and more patent filings for the company.

The USPTO Offers SMEs Mechanisms to Effectively Participate in the IP Economy

One of the USPTO's priorities is to provide training and education about the United States' IP system and the importance of developing strong IP protection. Independent inventors and SMEs sometimes struggle with how to file for and obtain IP protection for their innovations due to a lack of financial resources.

Through no-cost programs, reduced fees and international assistance for U.S. companies protecting their intellectual property abroad, the USPTO is committed to helping these innovators as they serve a vital role in the future economic development of the United States. For instance, under-resourced independent inventors and small businesses may secure free legal representation through **Patent Pro Bono Programs** across the country. Another way for small businesses to secure free legal services is through the **Law School Clinic Certification Program**, where law students help innovators with either the patent or trademark prosecution process under the supervision of law school faculty. Further, many independent inventors and small businesses file patent applications without the assistance of a registered patent attorney or agent—also known as "pro se" filing. Through the **Pro Se Assistance Program**, the USPTO has tools to assist pro se applicants and employs a dedicated team that is available to answer filing questions and help simplify the process. To help keep costs low, the USPTO offers independent inventors and small businesses reduced patent filing fees, where under-resourced inventors can receive up to a 75 percent discount on the USPTO's fees.

Competing globally can be challenging, particularly for U.S. businesses that lack the in-house resources and expertise they need to deal with foreign IP regulations and protect their IP abroad. To help navigate the global IP landscape, the USPTO has **IP Attachés** stationed around the world, working directly with U.S. businesses on IP issues—including helping to stop counterfeiting and piracy—while supporting U.S. efforts to improve IP laws internationally.

The Recently USPTO Opened Regional Offices to Serve as Hubs of Education, Outreach, and Innovation

In pursuit of its mission to foster innovation, competitiveness and economic growth, the USPTO recently opened regional offices in Detroit, Michigan; Denver, Colorado; Dallas, Texas; and San Jose, California in Silicon Valley. These regional offices work in concert with USPTO headquarters in Alexandria, Virginia, and serve as hubs of education, outreach, and innovation. In this way, the USPTO is more effectively able to reach a wide spectrum of communities, including SMEs, emerging enterprises, independent inventors, intellectual property practitioners, and to further its Science, Technology, Engineering, Mathematics (STEM) education and outreach efforts to students and educators. The regional offices also provide education programs, hands-on information and easier access to USPTO resources and services for under-resourced independent inventors and SMEs. By strengthening relationships with communities across the country, the USPTO, through its regional offices, now can more nimbly tailor its resources and programs to better serve the needs of the these communities to overcome their unique challenges.

For instance, since the Silicon Valley Regional Office opened in October of 2015, SMEs have been taking advantage of outreach and education programs held both in the regional office and throughout the Pacific region. Through the efforts of the Silicon Valley USPTO last year alone, the regional office reached over 15,000 participants, most of which were independent inventors, start-ups, and small business owners. These programs continue to grow in popularity and cover a wide spectrum of intellectual property topics. They also highlight USPTO resources available to help entrepreneurs successfully navigate the process and obtain intellectual property rights. In addition to outreach and educational programs, the regional office routinely offers in-person services, such as one-on-one consultations with a patent examiner, search training on USPTO patent and trademark databases, and patent examiner interviews to help patent applicants resolve issues during prosecution.

SMEs Use Patents to Ensure Freedom to Operate, Licence Their Inventions and to Build Investor Value

For SMEs, securing patent protection is attractive for a variety of reasons and is often a core aspect of a successful business strategy. For example, patents serve to attract investors and buyers, deter infringement, increase leveraging power and add value to a company's assets. Patents can also be used to help gain entry in and deter others from a market. They are also useful as a marketing tool to promote unique aspects of a product and to generate a revenue stream through the licensing of patented technology. The USPTO frequently delivers outreach and education programs on securing patent protection, and partners with organizations on ways to leverage the variety of uses and benefits of the patent system for SMEs.

From an SME perspective, patents are used to develop a culture of innovation, clarify ownership of intellectual property rights with employees and play a strategic role in joint-venture, partnership and acquisition discussions. Many companies of all sizes incentivise disclosure through patent filings for their employees to encourage product evolution and company security. By disclosing their work, potential later conflicts can be avoided if an employee moves on to a competitor.

For investors, and particular VC investors, good business practices around patents is a sign of good business practices in general. A prominent VC investor coined the expression "IP hygiene" when referring to possible reasons to file patents for a company. Indeed, for most VC investors, the patent situation in early stage companies is a reflection of the team's strength and ability to carry their mission forward and build a business.

During an exit, patents are an important consideration. A prominent VC firm reported that a wireless mesh-networking company was about to be acquired by a larger company when a red flag was raised around the ownership of patents. The acquisition target only licensed its technology from a third party but didn't own the patent rights, thus reducing the value of the acquisition. Patents also protect investors against downside risks. For companies who are not going to be the next unicorns, there is an exit known as "acqui-hire" where a small company is acquired by a larger company for its team and its assets. In the event of an "acqui-hire," the company's patents enable investors to recoup all or some of their investment.

Patent Litigation is Particularly Challenging for SMEs

Patent litigation, either as a defendant or a plaintiff, is challenging for SMEs as their limited financial resources can reduce their possibility of success.

While it is not lost on anyone's mind that many SMEs do not have the resources to finance patent litigations in the U.S., the existence of patent rights in the U.S. still present a risk that larger competitors take seriously and, as a result, deter them from recklessly infringing known patent rights held by smaller companies.

Some actors prey on SMEs, exploiting the imbalances in resources. To counter abusive litigation practices, new business models have emerged that can help start-ups defend themselves against patent litigation. These models include joint defensive patent litigation alliances (*e.g.*, Unified Patents), patent pools (*e.g.*, Via Licensing) and other mechanisms to acquire patents, which can be used as a deterrent against potential patent litigation from established players.

To help curb abusive litigation practices for SMEs, the USPTO launched an online toolkit aimed at empowering consumers with answers to common questions, information about patent suits and details about patent infringement. The toolkit includes information and links to services and websites that are designed to help consumers understand the risks and benefits of litigation, settlement, and to help them to pick their best course of action.

The USPTO's Patent and Trial Appeal Board (PTAB) hears appeals of examiner decisions in patent applications and reexamination proceedings, and renders decisions in interferences. With the implementation of the *Leahy-Smith America Invents Act of 2011 (AIA),* the PTAB now offers administrative trial proceedings, including inter partes, post-grant, covered business method reviews and derivation proceedings, where the validity of a patent may be challenged. These expanded PTAB proceedings can provide SMEs cheaper and faster alternatives in resolving patent disputes compared to seeking relief through U.S. court proceedings. ■

Available at Social Science Research Network (SSRN): *https://ssrn.com/abstract=3009315*