May 28, 2019

Startups and Patents: An Investor Perspective

In the popular mind, patents are often thought of as the lifeblood of high-tech innovation, and a *sine qua non* of high-risk/reward startup success. And, indeed, key patents have generated billions of dollars of profits and value for many companies. But for its PageRank patent, Google would likely be just another entry in the long list of 90s startup search engines that never went anywhere.

As real and significant as the PageRank patent was in creating the Google juggernaut, as an example of the value of patents generally it is rather misleading. The vast majority of patents, in fact, are never enforced, and have limited if any significant economic value.

As a venture and angel investor, I’ve seen a lot of startup pitches, a good proportion of which include assertions that patents will provide a valuable “secret sauce” that will give the startup the proverbial “sustainable unfair competitive advantage” and propel it to business nirvana. And it’s from that investor perspective – NOT from a legal perspective – that I’ll offer some thoughts about why investors often seem skeptical when entrepreneurs get promotional about how valuable their patents are (or will be).

Problematic Aspects of Patents

The core requirements for getting a patent – novelty, utility, and enablement – are largely about making sure patents have some actual value in commerce. And yet, most patents, whatever value they may have in theory, have little if any real practical economic value. Before we look at what kinds of patents can impress investors (and we will get to that), let’s look at some of the realities around the all-too-common “vanity” patent.

- Public Disclosure of Patent Applications. For starters, patents (and patent applications) are in the public domain. Generally, 18 months (US) after someone files a patent (long before the patent is granted), the application is available to the public generally. And the
requirements for a good patent application—most particularly that the application discloses how it works (the pesky enablement requirement)—provide potential competitors with a step-by-step guide to recreating the invention themselves.

Now, knowing how to copy a patented invention might not seem that big a deal. The whole idea of the patent is that it gives the holder a legal right to prevent such copying for a certain period of time. Alas, that protection sounds better than it often is. On the one hand, some patent violations can be very hard to detect. Say, for example, you own a patent on a process to make a widget at a lower cost than your competitors. If one or more of your competitors copy your process—violating your patent—how will you know unless they tell you? There are lots of examples of patents that would have a great deal more value but for the difficulty of detecting and proving infringement.

Beyond that, disclosing the “how it works/how we do it” aspects of an invention provides competitors a pretty good start in terms of figuring out ways to get around your patent. Many of the times I’ve taken a particular patent application to a good patent lawyer and asked whether a competitor could engineer around the application the answer has been somewhere on the “yes” to the “probably” part of the spectrum.

- **Freedom to Operate Considerations.** Next up on the problematic patent list is whether a patent has any utility that does not, when implemented in a product/service, violate someone else’s patent. For example, suppose you have discovered and reduced to practice an improvement on a widget that is itself subject to a patent (often multiple patents) held by one or more third parties. Absent permission of those patent holders, you can’t use your patented invention in commerce. Investors are generally loath to back startups with a valuable patent unless/until the startup has secured the necessary rights to actually use the patent in its business. That is, unless and until it has freedom to operate.

- **Limitations on Patentable Subject Matter.** Another set of real world limitations on the value of patents is found in what kinds of things you can patent. While this article is—a reminder—not written from a legal perspective but rather from an investor perspective, it is useful here to quote what U.S. law says about what can be patented. In that regard, the applicable federal statute says that any “any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof” can be patented.

That covers a lot of ground—but perhaps not as much as you think. The law around what constitutes patentable subject matter is full of gray areas and always evolving (or de-evolving) as the courts weigh in and out of the debate. Without delving very deep into one of the more convoluted legal thickets, you can count on investor skepticism if you are thinking of patenting a software program, or a business model or method. It is the rare software program or business model (these days, at least) that a good patent lawyer will give any sort of definitive opinion to the effect that it is patentable—and (as important) enforceable. Most investors look at these kind of patents as worthwhile to pursue, but not of themselves compelling reasons to invest.
- **The Golden Rule (as Applied to Patents).** Economists often practice their trade in an ideal world of free, frictionless markets where laws are clear and regularly enforced at little expense to the affected parties or society as a whole. Which is to say, in some world other than the one we live in. Even if filing and prosecuting a patent application to issuance is in many cases not beyond the reach of a modestly funded startup, enforcing a patent against an established competitor with orders of magnitude more dollars and talent available for the battle can be prohibitive for many startups. Even in the somewhat-rare case where a startup has a sure-fire winner (and it is all but impossible to get any decent lawyer to guarantee that sort of thing), and the risks of a fight, just in terms of expense and distraction and uncertainty, can make enforcement problematic at best.

- **“One Trick Pony” Patents.** The opposite of a platform or foundational patent is what I call a one trick pony patent. Instead of opening up a whole new area of technology the one trick pony patent has a very narrow scope. It’s like having a car that can turn left better than any other car. You’ll win a lot of NASCAR races, but don’t count on riding it to the top of the auto business.

In addition to often limited market implications, one trick pony patents are typically more vulnerable to engineering around than patent families that have broader scope.

Considering all of the above, you should be able to at least understand where patent-skeptical investors come from. The distance between the ideal of patents – you got there (wherever there is) first and can for many years keep anyone else from joining you – is a long way from the real world of patents. For every entrepreneur who really has a patent-to-riches story to tell, there are dozens with patents-to-so-what tales to tell.

**Patents that Impress Investors**

All of the foregoing notwithstanding, patents can be very valuable assets, including for cash-challenged startups. Investors will generally look more favorably on patents that fall into one or more of the following categories.

- **Platform Patents.** Some patents represent literal choke-points on the commercialization of valuable new technologies. A good “platform” or “foundational” patent can even create an industry, as the Cohen-Boyer patents did for biotechnology. (The Cohen-Boyer patents were filed in 1974, and until the last expired, pretty much everybody who wanted to practice recombinant DNA technology in drug discovery and development needed a Cohen-Boyer license.)

Imagine, if you can, a world where the very concept of ride sharing was subject to a patent (it’s just an idea – it’s not patentable). Consider how Uber, of the recent uber-IPO, would own the whole space, rather than just being the biggest player. It boggles the mind.

So, if you want to ward off investor skepticism about your startup’s patent(s), talk about how they put a competitive moat around a whole new technology platform; how they are at the foundational level of a whole new industry. Of course, you should only say those kinds of things if they are true.
• **One (Big) Trick Pony Patents.** If a true platform patent is the grand slam of the patent world, a "one-off" or "one trick pony" patent can still on occasion be a home run. Consider fluoxetine – brand name Prozac (Eli Lilly) – one of the first SSRI drugs (selective serotonin reuptake inhibitor). If Eli Lilly had been able to secure a patent on SSRIs generally, it would have been a grand slam, but it couldn’t (SSRI describes a natural process of nature, and “discoveries” of the same – as, for example Einstein’s discovery of general relativity – was not patentable). Still, as the first to market with a drug that leveraged the natural process of nature inherent in the SSRI phenomenon, Lilly had a solid home run on its hands – even as it faced competitive SSRI drugs well before its fluoxetine patent expired.

• **Strategic Patent Families.** This notion is really just a variation of the platform patent idea, but it does have some practical implications for entrepreneurs. The idea here is to develop a portfolio of patents that together provide a moat around a whole new field of valuable technology. The key, here, beyond the moat being as real as it is presented, is not to jump the patent-filing gun. You need to be careful to have all the necessary patents in the family on file before the earliest applications become part of the public domain (as discussed above).

• **Tactical Patent Clusters.** Modern technology is characterized by complexity on many levels. The important level here is inter-connection. Today’s generic smartphone – unlike, for example, Eli Whitney’s Cotton Gin (patented in 1794) – is an amalgamation of components and processes that are covered by patents held by dozens of companies. Over time, and particularly over the last several decades, as the complexity of the technology behind common products and services as increased, companies have increasingly turned to cross-licensing, rather than litigation, to manage that complexity. So-called “Open Innovation” is a game played by businesses that have variously important IP (including patents) that other companies, including competitors, variously need in their businesses, and at the same time variously need IP owned by those other companies. To play the game – one hand washes the other with appropriate cross-licenses – you have to have some variously valuable IP. The payoff? Both parties get cheap and certain (compared to the expense and uncertainties of litigation, at least) access to technology needed in their respective businesses. (Note how such tactical patent clusters can help address freedom to operate issues.)

**Final Thoughts**

Patents can have enormous value. Google’s PageRank patent took the company from just-another-search engine startup to near the top of the internet mountain, and the Cohen-Boyer patent enriched its holder (Stanford University) and created an entire new industry. Strategic patent families can do some of the same heavy lifting, and compelling one-trick-pony patents can enrich, if not single-handedly define, even a very large business. Finally, well-conceived and constructed patent clusters can provide a startup with valuable IP “currency” that can both protect and extend its commercial reach.

All of that said and done, though, most patents have little if any real economic value, particularly in isolation. The very limited real world value of most patents – coupled with entrepreneurs who don’t get
that, and oversell their patents (and often undersell their more valuable if less tangible IP assets) – makes many investors skeptical when entrepreneurs tout the patentability of their secret sauce. Entrepreneurs need to understand that skepticism and, when they really do have valuable patentable secret sauce, know how to pitch it so as to best overcome that skepticism.

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