

My Invention is Vital for My Business Plan. But I Don't Have Much Money Yet. How Can I Save?

This Patent Stuff and My Semiconductor Business – Part 12

Welcome to this post about patents and chips. Not a lot has been written about this combination, but there is a lot to know, especially for the innovators and entrepreneurs themselves. In this three-weekly series, I talk about various aspects, from my dual points of view of a patent agent and a semiconductor entrepreneur. If you like the article and read it on LinkedIn, give it a thumbs up, and/or click on Follow. If you like to work with us for your next patent, "contact us" info is on www.icswpatent.com. You can also subscribe/unsubscribe for short email alerts when the next post is available.

Starting a company may be exciting, but it certainly isn't easy! Many VCs aren't familiar with the word "semiconductor" as opposed to "social network", and if they are, it doesn't always help, either. Those who do invest in semiconductor technology can afford to be picky, and they all want to know that they invest in a protected technology. Assuming you have an IP protection strategy (see my earlier post **Developing an IP Protection Strategy for Your Semiconductor Company**, [part I](#) and [part II](#)), maybe you've worked out that you want to protect some of your innovations in one or more patents. But there is a bit of a conundrum. You need to protect your innovations also from the VCs whose money you need to get your company off the ground. VCs don't sign NDAs, and you don't want VCs (who decide not to invest in you) to walk away and say *thank you*. Or, take your idea even without saying thank you. You need the patent while you don't have a lot of money yet. How can you save (and be smart)? I tried to make a Dumb / Smart table for you, but that turns out to be simplistic. Instead, commented recommendations might be better.

12.1 Generally Not Recommended (If You Want to Save Money)

It is usually better not to:

- Spend a month writing up the invention and making nice drawings. You could spend a lot of time writing things that are not needed for the patent, or counterproductive, and still miss out on the things that need to be there. Trying to do an expert's work when you're not the expert is often a big drain on time and resources. You could better use your time for the work that you are expert in and expand your resources. You are unlikely to save any money by doing work that may need to be redone. Often, even drawings need to be redone.
- Figure out ways to write about your invention without spilling the beans. This can result in a rejection of your patent application, or getting a worthless patent on some technicality, leaving your core innovation unprotected.
- Call 10 patent practitioners and choose the cheapest. You may get what you pay for.

- Call 10 patent practitioners and choose the most expensive. You may not get what you pay for.
- Call 10 patent practitioners and choose based on the price, without knowing exactly what is included and what not, what variations in price are likely, and when what payments should be expected.
- Do a patent search. The results could give everybody extra work. Once you know something that is relevant, you must report it to the patent office, and everybody needs to fully review how it impacts your patentability. However, in some cases your patent practitioner recommends doing a prior art search. This adds a little bit to the cost of patenting, but it can impact the patent application's description in major ways. Later on, it will probably save the cost of responding to a couple extra office actions, amply earning back its initial cost.
- Start by filing a non-provisional application, or filing in several in different countries, or a PCT. (A PCT is an international patent application.) But, there can be circumstances in which you want to do exactly one of those things. Discuss with your practitioner!

12.2 Generally Recommended

It is usually better to:

- Spend one hour to brainstorm with the inventors (if there are more than one) to document what the most valuable part of the innovation is, in its simplest form, and to list what the optional goodies are that make it work best in your application. Imagine a competitor using your basic idea, figuring out how he can do what you did in a different way, so that it is not covered by what you exactly wrote down. Follow up by making a list of all the ways that your invention can be used other than how you will use it.
- Once you have your bullet list from the brainstorm, make hand sketches. These will help you explain it to your practitioner of choice.
- Find a practitioner who will (or already does) understand your technology fully, and who is enthusiastic about it. Of course, he or she should be offering a fair price. He or she should also be able to help you fill in any gaps in your IP protection strategy for this invention, and should be able to manage any international rollout. If it's a semiconductor person, she/he will have proven associates in all the countries that are relevant for you.
- Talk with a practitioner to get to know him/her, and ask for a full proposal. You want to know what expenses go down at what time, which parts are fixed and which parts are charged by the hour, and what uncertainties there are in the required budget. For instance, I always try to give a budget that is slightly pessimistic, and I keep a planning margin for patent office costs. I really don't like to have to badly surprise a customer.
- Give the practitioner the brainstorm result and the sketches, and any backup information that help understand the context of the invention. Explain what problem you are trying to solve, how others before you have solved it, and what the downsides are of these existing solutions. Discuss the brainstorm results with your practitioner, so that he or she fully understands what parts of your invention are strategically most important to you.
- Start by filing a provisional patent application. It gives you a year extra protection at very little cost. And most importantly, it gives you the possibility to still add elements to your invention during that first year. In many cases, I like to write a fully detailed provisional application that needs minimal changes to file as a non-provisional or PCT or EP. That saves both me and the customer "restart" time near the 12-months mark.

There are a couple of ways to approach writing the detailed description in a patent application. Two of them are: drawings first, and claims first. When doing the drawings first, the practitioner makes a storybook in the form of a series of progressive drawings, and then sets out to explain the invention while describing the drawings. When doing the claims first, the practitioner makes a claim set, then plans a series of progressive drawings based on the claim set, and then writes the description. From the end result you may not be able to see what strategy the practitioner followed, since the end result still follows the same overall application template. As an inventor, you cannot predict what the practitioner's approach will be. But you can predict that the practitioner will need the full freedom to plan the drawings, change them, and make a consistent connection between the drawings, the text, and the claims. Your practitioner will guide you through the process, and will ask for feedback when relevant. It will cost you much less time than any other way of trying to get to a patent.

12.3 Conclusion

Although there are no magic ways that make patent costs go away and still end up with a valuable patent, you can save a decent amount of time and money by working efficiently, following the guidelines above. Should you think they only look like common-sense guidelines, I have to agree with you!

Upcoming:

- 13 I Want to Protect It Now—But Am Still Working Out Architecture Details. Can I Add Those Later?
- 14 I Want to Use an FPGA Before an ASIC. Can It Be One Patent?

Published so far (find the articles on www.icswpatent.com or #ThisPatentStuff):

- 1. So You Got This Great Idea That Will Wipe Out Competition. Now What?
- 2. Developing an IP Protection Strategy for Your Semiconductor Company – PART I
- 3. Developing an IP Protection Strategy for Your Semiconductor Company – PART II
- 4. In What Countries Should I Patent, Anyway?
- 5. Choosing the Right Patent Person for Your Inventions
- 6. How is a Chip or Firmware Patent Different than Other Patents? What About a Software Patent?
- 7. Woohoo! I Invented a Huge Improvement over My Competitor's Invention!
- 8. I'll Be A Billionaire Soon Enough. But Now I'll Just Buy This Book on Patent Writing on thriftbooks.com.
- 9. My CTO Can't Explain His Invention to Me. But He Is the Smartest Guy in the World.
- 10. Should I Do a Provisional, Non-Provisional, Or a PCT?
- 11. What Makes an Inventor, and How Can I Stimulate Innovation?
- 12. My Invention is Vital for My Business Plan. But I Don't Have Much Money Yet. How Can I Save?

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