

Do I Really Need to Spend So Much Time to Get a Patent?

This Patent Stuff and My Semiconductor Business – Part 23

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 a dual perspective 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.

If your expectation is, a couple of hours here and there, then the answer is Yes. You need to spend that much time to get a patent. If your expectation is a month of writing, and then hours talking with the patent practitioner, and once there is a response from the patent office, again days and days to analyze all that stuff and prepare a response, the answer is No.



Getting a patent doesn't need to be a big drain on your time. You're paying somebody a lot of money, and that person will put in a lot of time, so that yours can be limited. The idea is that a practitioner can do it in a fraction of the time you'd need to spend, can do all the things that you haven't been trained for, and avoid pitfalls you aren't aware of. If you find that you do need to spend a lot of time, it suggests that your practitioner is not right for you. We all have our specialties. You may need to find somebody else.

If you don't have such an extreme situation, it is still possible that you spend more time than necessary. Here is how to work efficiently and be maximally productive. Do a bit of preparation, as follows. Don't use that PowerPoint that you made last month for presenting to your coworkers. Write a text document (the *invention disclosure*), and write it in a way that a recent college graduate can understand it. If you find that only an expert can understand it, delete it and start again. Spend no more than 3 hours. Limit your writing to 2 pages. If it is longer, then make a super clear split between what you consider the invention, and the implementation. The first two pages are for the invention only. Also, remember that the patent can only protect an invention, not necessarily a product. You want your invention to be described as generally as possible before you care about any implementation detail, or about additional product features.

1. Define the problem that you're solving. Explain it in writing in plain English. One paragraph. Avoid acronyms that a college grad wouldn't know.
2. Describe the context in which your invention works. Give it a couple of paragraphs if necessary. Make sure that a reader doesn't need to guess.

3. Get to the point. Write down in one paragraph what the essence is of your invention. Think of what your *Aha!* moment was.
4. Write down in one paragraph how your invention is different than what everybody else does.
5. Make a sketch that clarifies the invention. You can draw it by hand. If necessary, make a couple of sketches, so that you show the invention, and how the invention is applied.
6. If your invention includes doing something, then don't just mention it by name, but make a simple flow diagram. Minimize the number of branching decisions, and the number of loops.

At this point, you may provide your documentation to the patent practitioner, and schedule a call. Use desktop sharing. Don't be afraid to use a camera. If video helps to make working together easier, use it to your advantage. Allow your practitioner to record the meeting, to be able to watch it again and get the most out of it.

Your documentation helps the practitioner to get the context and possibly prepare some questions. Should you give your patent guy/gal much more than just a couple of pages, then be prepared that he/she may get royally lost. You're an expert in your field, and you have just invented something that presumably nobody else has ever considered. Very few people would be at your expertise level for this. Overwhelming your patent practitioner will not help efficient communication.

The call (the *disclosure meeting*) should get the practitioner to the point that he/she understands the invention, and can talk sense about it. To get there may require him/her to ask questions about things that are obvious to you. In some cases, questions are about stuff that requires a lot of expert background. In those cases it will help if you can identify public material that helps to get at least an intuitive understanding. Perhaps there is a tutorial somewhere, or a good Wikipedia page, or a whitepaper by a competitor. Anything that is enlightening and not 20 pages long.

Once the practitioner starts writing the patent application (right, YOU must not do it!) he or she may come up with some additional questions (Why this and not that? How about ...? How do you do this?) and it will be helpful to respond relatively quickly. In some cases, even before the first draft, your practitioner may send you a set of drawings, a claim set, or both a set of drawings and a claim set for review even before the first full draft. This is an efficient way of getting to the right point soon. Writing progress may hinge on your answer, and you don't want to interrupt the writing too often. Some time, maybe one or two weeks after the disclosure meeting, there will be a draft to review. The first draft is of course work in progress, and should be between yourself and the practitioner. The practitioner will want to know if he/she is on the right track (does he or she fully understand the invention?), if the document is correct, and if the narrative is complete. Both helicopter view and detailed feedback is useful. DON'T rewrite (parts of) the document. Where there is an issue, point it out. The practitioner owns the document, and making unexplained changes that potentially create legal issues is not helpful. Where something has been written in an awkward way, suggest an alternative, or point out why it is awkward.

It's often useful to have a review meeting at this point.

Most practitioners will be able to write a near-final draft based on the feedback for the first draft. I usually provide a redline document so that you can see the changes between the initial and next draft. Often, a draft is between 20 and

30 pages, with 1.5 line distance. Since it is your invention, the material should not give you a headache, and you should be able to review it in a couple of hours.

Most practitioners have their own style of writing an application, of course. We all follow the basic template for a patent application. But within that, some like to use vague language whereas others prefer to be clear. Some include a lot of implementation details, whereas others generalize the invention as much as possible and then point out which different implementations it may have. Some inventions can be implemented just as easily with an analog circuit, a mixed-signal circuit, a fully digital circuit, a dedicated processor, firmware on general-purpose processor, or an FPGA. In some cases, part of an invention can be either on-chip or off-chip. By focusing too much on one implementation, you may give away your invention for some or all other implementations. For this reason, while your perspective may be very much from the design that incorporated your invention, the application should take a much broader perspective.

If you feel that the second or third draft correctly and completely describes your invention, it is ready for filing. At that point you need to complete some paperwork (declaration that it is your invention/you are one of the inventors; assignment of the invention to your company) and you can go back to everyday work. Whoever in your company coordinates patents will be able to handle it from there. If, a year later or so, the patent office comes with issues, there is a good likelihood that the patent practitioner, understanding the invention, can autonomously handle it. In some cases, he or she may call you up and ask what you think. I do that sometimes when I think that an amendment may impact the strategic value of the patent for your company. This is usually more important for small companies and individual inventors than for large corporations.

Upcoming:

- 24. Can I Check If My Patent Guy/Gal Is Doing a Good Job? (How Do You Know If Your Patent Practitioner is Doing Your Invention Justice?)
- 25. I Can't Wait for the Patent Office for 3 Years, Can I?

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?
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?
15. How Do I Know If My Invention Is Patentable?
16. How Do I Screen My Employee's Invention Before Deciding on a Patent?
17. A Prior Art Search Before Filing the Application
18. Should I Pay Extra to Get the Patent Faster?
19. How Many of Those Patent Office Actions Should I Budget For?
20. My Company is in Brazil. How Do I Manage Patenting Worldwide?
21. Why Are Patent Claims So Weird, Anyway?
22. They Don't Understand My Invention!!
23. Do I Really Need to Spend So Much Time to Get a Patent?

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