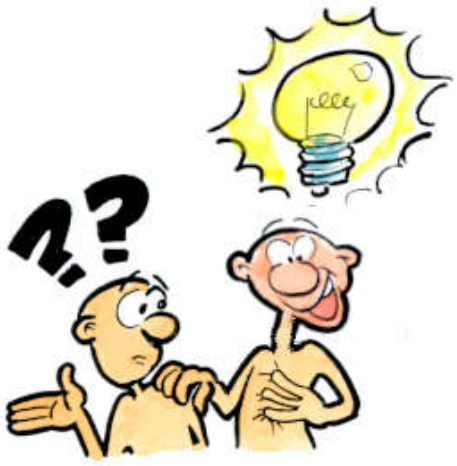
So What If the Patent Guy Doesn't Understand?

This Patent Stuff and My Semiconductor Business – Part 26

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.

It's a big deal, actually. Unfortunately, it happens a lot. Patent practitioners usually get a wide range of inventions that they need to patent, but you can't be an expert in everything, can you? Maybe if, as a patent practitioner, you focus on inventions like a new method of swinging on a swing (US 6,368,227, I think Steven and Peter Olson are geniuses, by the way), then it won't take too much time to get familiar with the inventions. But for anything as broad as chip architectures, and methods to get things done electronically, it can take considerable time to get up to speed. Read on to understand possible consequences if your practitioner doesn't understand what you've achieved:



Perhaps you've provided him with a scientific article you wrote. Perhaps, for the article, you considered writing just enough that it would be published by the magazine you target. But you didn't really want to give away your secret, so you brushed over a couple of things, didn't make much of a point of something else, added some measurement results of a prototype, and concluded identifying some work you plan to do next year. You focused in the article on the prototype you made. Beautiful article! But for a patent, it could become a disaster. Say, your practitioner touches it up a little bit so that it has some nice legal sounding language in it ("Let us now turn to a block diagrammatic representation of an embodiment of blah blah"). Overall, he leaves the article intact. Then, he adds some claims, a summary, and an abstract.

Where does he get the claims from? Well, he read the article, spoke with you, picked up that you were so enthusiastic about the semiconductor process you used, and that a key feature that you are happy about is an interface that allows a user to change something. He writes a claim 1 that describes your prototype and the circuit or blocks that do the trick, and adds the interface. He mentions the semiconductor process in a dependent claim. Etc. He lets you read the application, you recognize all your inputs, so you are happy and tell him to file the application.

Eleven months later, he receives an office action—a letter from the examiner at the patent office. There were twenty claims, and they are all rejected. But he told you in advance that that is quite normal, so you're not worried. He'll take care of it. He does. He reads the office action, and finds there are several reasons for the rejection. One of them is that something is vague (a rejection under 35 USC 112), and he needs to fix it. Another one is that the examiner says that it is obvious, because two or three other, older, patents together have all the stuff that is in claim 1. He reads the older patents, and sees that they are using all the same words that you have in claim 1. He calls you up.

After hearing what's up, you clarify the thing that was vague. It was in the things that you brushed over, and the other thing that you hadn't made a point of. Now your guy starts to understand the invention, sort of. He's quiet for a couple of seconds, then changes the subject to the obviousness rejection. He shows you the prior patents, and you're shocked, because they are, although in the same field, about totally different problems. He assures you (correctly) that these prior patents are legitimate prior art, and that he will have to deal with them. You notice that, although the older patents use the same words as you did, one of them meant something else with one of the words. You discuss with him, and he hadn't expected it before, since he never tried to fully understand your invention. Unfortunately, he hadn't defined the term in the application, so he cannot introduce that at this stage. Anyway, he knows how to proceed. "Don't worry, I'll get you the patent!"

He does. How? He moves a feature of the semiconductor process that you liked so much from the dependent into claim 1. He also changes ("amends") some of the language that was determined vague, and writes something else. You think it is even vaguer, because now you don't understand the meaning of claim 1 anymore. He submits his response to the office action, including the amendments, and two months later the patent is allowed.

What just happened?

He got you a patent that is worse than worthless. He gave away your technology. Neither the interface, nor the foundry process, should have been in claim 1, because they are not essential for your invention. A competitor can just use a different foundry process, or make something without the interface, and freely use your invention. A competitor that wants to use the same process and also provide an interface, can refer to the new vague language that doesn't describe your invention anymore. If you want to go into a court battle over it, it will cost you millions of dollars. Oh, and by the way, since your guy didn't understand your invention, he also forgot to mention that the order of two blocks could be reversed, and that the processor could be replaced by a hardwired circuit. A competitor who did understand your invention can just slightly change the architecture, and achieve the same without infringing the patent.

You're not aware of all that, though. Nobody told you the consequences of what happened. Your guy just happily called you up and congratulated you with the patent. He's very happy to work with you, because working together has been so efficient for both of you. Couldn't be better!

A couple of months later, you call him, because you have finished some of the work you were planning, and are ready to file a patent for it. Since by now, he better understands what your first invention was about, and picks up about the new one fast. He says he will check something, and call you back. A few weeks later, you haven't heard from him, so you give him another call. He hesitates a bit, and finally tells you that there may be a small issue. In your first patent, and in the article you subsequently published, you had identified the problem and mentioned that you'd work on it. But now that

he understands the invention, he also understands that you already hinted at the solution. It is longer than a year ago that you filed the original patent application. Your first patent will likely be used as prior art in an obviousness rejection. You need to add something else new, because by itself your current invention will no longer be patentable.

The story I just outlined is only partially made up. But it is exemplary for real-life situations. Would something similar happen if the practitioner doesn't work from a scientific article? Unfortunately, yes, there are many such examples. A scientific article has other objectives than a patent application, and shouldn't be used for it. But the root cause of the problem is that the inventor and practitioner are not communicating sufficiently (it is hard!), and that some practitioners accept not fully understanding an invention—because investing the time to learn the invention can be very expensive.

I'm glad that the above didn't happen to any of my patent customers. Make sure it won't happen to you, either. Spend enough time with your patent representative to fully explain the invention, in great detail. Don't be afraid to ask how familiar he or she is with your technology. If you get a vague answer, explain as if you're explaining to a new colleague, who just graduated from college. Don't assume that saying something once will be sufficient. Circle back to know how much he or she understood, and be there to answer questions. Make sure they can call you up whenever there's a question. He or she may not be up to date with all related technologies that you interface with or refer to. Help him or her out of acronym hell. If this sounds like a lot of work, relax, it isn't so bad. And, you'll easily save back the time once you get the first draft of the patent.

Upcoming:

27. Is it OK if I Can Hardly Recognize My Own Invention in the Application?
28. CES or DAC Is within Weeks. I Got to Present and Demo There!

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24. Can I Check If My Patent Guy/Gal is Doing a Good Job?
23. Do I Really Need to Spend So Much Time to Get a Patent?
22. They Don't Understand My Invention‼
21. Why Are Patent Claims So Weird, Anyway?
20. My Company is in Brazil. How Do I Manage Patenting Worldwide?
19. How Many of Those Patent Office Actions Should I Budget For?
18. Should I Pay Extra to Get the Patent Faster?

17. A Prior Art Search Before Filing the Application

16. How Do I Screen My Employee's Invention Before Deciding on a Patent?

15. How Do I Know If My Invention Is Patentable?

14. I Want to Use an FPGA Before an ASIC. Can It Be One Patent?

13. I Want to Protect It Now, But Am Still Working Out Architecture Details. Can I Add Those Later?

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

11. What Makes and Inventor, and How Can I Stimulate Innovation?

10. Should I Do a Provisional, Non-Provisional, Or a PCT?

9. My CTO Can't Explain His Invention to Me. But He Is the Smartest Guy in the World.

8. I'll Be A Billionaire Soon Enough. But Now I'll Just Buy This Book on Patent Writing on thriftbooks.com.

7. Woohoo! I Invented a Huge Improvement over My Competitor's Invention!

6. How is a Chip or Firmware Patent Different than Other Patents? What About a Software Patent?

5. Choosing the Right Patent Person for Your Inventions

4. In What Countries Should I Patent, Anyway?

3. Developing an IP Protection Strategy for Your Semiconductor Company – PART II

2. Developing an IP Protection Strategy for Your Semiconductor Company – PART I

1. So You Got This Great Idea That Will Wipe Out Competition. Now What?

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