

## I Can't Wait for the Patent Office for Three Years, Can I?

### This Patent Stuff and My Semiconductor Business – Part 25

*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](http://www.icswpatent.com). You can also subscribe/unsubscribe for short email alerts when the next post is available.*

Patents can take a long time to be granted. In some countries even longer than long! It may be possible to pay a patent office more, and get priority. For example, in the US you can file an application for Track One Prioritized Examination, which has a target time to issue of one year. Of course, it's not cheap. So should you wait?

Let's look at what your business objectives may be.



#### You Want to Talk with VCs

This is most often important for brand new startups. You have a great new idea that can give you a real edge on the competition, but you need money to get the company going. Unfortunately, venture capitalists (VCs) love to learn about your technology and your plans, but they may not be so eager to sign a non-disclosure agreement (NDA) with you. If they doubt you, but not your technology, they could just walk away with it. Unless you have protected it, that is.

In this case, a patent pending will give you protection. Even if you have filed only a provisional patent application, and even if it was filed in only one country. You need to tell them that you have a patent pending. The actual amount of protection depends on how well (from a legal point of view) the provisional was written. Be aware that, no matter how eloquently you can write, unless you understand how patent laws work, you expose yourself to risk by writing it yourself. Use a professional, who can understand your technology.

But do you need the patent fast for this objective? No, you can file fast, and then wait long. In the US, the longer you wait, the longer you push out some of the expenses. In some other countries it is the same, but in yet other countries it may not make much of a difference.

### **You Want to Talk with Customers**

Here, the situation is a little bit the same as with VCs. A provisional patent application can already give you decent protection, if it is professionally prepared. If you can, always combine it with an NDA, though. That deters customers from sharing your datasheet with your competitors—the people who are most committed to obtain and read them. Some branches, like IP companies and certain fabless semis, can ask for an NDA with little customer pushback, but for others, like fabless semis with relatively low-tech customers, that can be difficult.

In any case, you are not in a hurry, if all you want to do is talk with customers. Walk the patent road, slowly. Mark your product offerings or your technology clearly as having one or more patent(s) pending.

### **You Want to Discourage Competitors from Using Your Technology**

Same thing. Competitors may be more aggressive, though, particularly in some countries that don't have a lot of respect for IP. If a competitor starts producing or selling anyway, you can tell him that he needs to stop, or otherwise bad things will happen. But the competitor knows that you won't be able to do anything until the patent has been issued. And even then, it depends on what exactly has been allowed. So, a patent pending can reduce the number of competitors that copy your product or your technology, but it may not stop all of them.

Remember that you must decide if you want to expedite examination at the time of filing your non-provisional application(s). So, use your intuition to sense how aggressive your competition might be.

### **You Want to Stop Competitors and Other Infringers**

You can only stop somebody if you have an issued patent. And enough dough to litigate them. If your core technology is of sufficiently high value, then you cannot wait 3 years for the patent office (or your own team) to get a patent. Sprint from the start. Go directly for a non-provisional, and request prioritized examination. That costs a couple of \$1,000 extra, but it probably gets you the patent within a year. If you file in multiple countries, you might earn the investment back as well. Read on.

### **You Want to Lower the Total Cost of Getting International Patents Issued**

If you want your patent issued in multiple countries, it is sometimes useful to file an international patent application (also known as *PCT*) before you file in individual countries. This "national stage" of filing in individual countries follows the "international stage" which lasts up to 30 months from your earliest priority. So, if you file, for example, a provisional application in some country on January 1, 2022, and you follow it up with a PCT application on December 31, 2022, then your international phase starts that day (December 31) and lasts until June 30, 2024. The last day you can file applications in each of your target countries is June 30, 2024. Then, the financial floodgates open, and each of those countries is going

to examine your application, and send you office actions, to which you must respond, costing you money to patent firms in all those countries, and money to keep your responses coordinated and aligned. It's expensive. But...

There is something you can do about it. Patent Offices don't like to do work that has already been done, so quite a few of them have made bilateral agreements to recognize and use each other's work. These agreements are jointly known as the Patent Prosecution Highway (PPH). In a broad brush stroke, if your patent is first allowed in for instance the US, then your applications in China, Japan, Korea, Europe, and other jurisdictions can receive the benefits of the work done in the US, significantly lowering the effort and cost in those other jurisdictions (unfortunately, Taiwan seems to have been excluded from the PPH).

Thus, you can save money in the other jurisdictions by speeding up examination in one country, such as the US. In that case, spending a few \$1000 on Track One accelerated examination is a great investment. You don't want to wait 3 years for the patent office. You file your non-provisional application in the US as soon as you're ready (perhaps even foregoing the provisional application), and request Track One prioritized examination. Get a first patent fast, and save money!

### **You Want a Patent, But Want to Push Out the Cost as Long as Possible**

Cash management, right? You want to pay as late as possible, because the earlier you pay, the more expensive the money is. In your seed round, you don't get a lot of money per share. In contrast, once you've gone public, each share gets you a lot of money. So you want to get the patent's protection early, and its costs late. What you can do is the following: you file a provisional (lowest filing cost), followed by a PCT at 12 months. That gets you in the international stage. When you receive the "written opinion" (result of the search report and why your invention lacks novelty), you read it, smile, and sit back. At about 30 months (it can be a bit longer in Europe and China), the national phase starts. So, in almost 2.5 years from now, you start filing your non-provisionals in whichever countries you need. Then you start paying from whatever mountain of gold you hope to have by that time.

When you start receiving office actions, you must respond. But if your mountain of gold is not as tall as you hoped, you respond as late as they'll allow you.

I can't give you legal advice, but there are some reasons why you have to be careful with this approach. It is risky if you cheap out too much. But that is always the case in any business situation. Also, the total cost will be higher than if you follow a more traditional approach.

### **You Want to License Your Technology to Others Who Build and Sell It**

Some individuals and some companies live off inventing stuff, but never building it (or maybe just a prototype to prove the concept). They find one or more companies that want to license it, and receive license fees and/or royalties. A great business model, well known from companies such as Dolby and ARM.

It is possible to license out your technology on the basis of a pending patent, even a provisional patent. But your license agreement is going to need a very good lawyer, and even then the risk remains that your deal collapses if the patent

doesn't issue, or if the patent once it issues doesn't cover all targeted elements. A licensee might even negotiate that if prior art shows up covering the invention, royalty or license fees owed to the earlier inventor come out of the money already paid to you.

Thus, an issued patent is worth a whole lot more than a pending patent. You don't want to wait several years for the patent office, you want to file a non-provisional as early as possible, and request prioritized examination.

### **You Want to Sell Your Company at the Highest Value**

I like to compare a patent portfolio with a telephone network: if there is only one subscriber, the network isn't worth a whole lot, yet. If everybody subscribes, it is very valuable. A patent portfolio with one patent is not very impressive, but if your company is for sale with a portfolio of 25 (or 250) patents that all relate to its core technology, the company may be very valuable.

In this case, of course, issued patents have the highest value. You might make a case for your pending patents, based on your prior issue rate, and the average duration to issuance—but there will be a difference. So, while you're building your company, you also want to build your patent portfolio. Consider how many years will pass before you sell the company, and you will know if you need to hurry with the patents. If your target is three years, then you're in super hurry and you want to expedite everything as much as possible. If your target is somewhere between six and ten years, then you can be much more relaxed. You can milk the provisionals first, and accept the natural speed of the patent office.

### **So, What is the Natural Speed of the Patent Office?**

It depends on the team (the "art unit") that examines your application. Some art units have a longer pipeline than others, and some examiners work faster than others. Overall, the USPTO targets issuance within 3 years, and may adjust your patent term if examination exceeds three years (you get a longer term if they were too slow). If you know from experience that your patent application is likely to be assigned to an art unit with a long pipeline, then that may help you decide to ask for accelerated examination. Unfortunately, in the US you can't file first, wait until it has been assigned to an art unit, and then ask for it. That would be too late to request accelerated examination—it needs to be requested at the time of filing.

Stage	Supported Business Objective
Patent applied (provisional or non-provisional)	<ul style="list-style-type: none"> <li>• Ability to talk with VCs and customers</li> <li>• Discouraging competitors from using the technology</li> </ul>
Fast issued patent	<ul style="list-style-type: none"> <li>• Lowering the cost of obtaining national-stage patents using the Patent Prosecution Highway program following an international (PCT) application</li> </ul>
Issued patent	<ul style="list-style-type: none"> <li>• Stopping competitors (and other infringers) from making, importing, selling, and using your technology</li> <li>• Licensing your technology to potential customers</li> <li>• Selling your company at the highest value</li> </ul>

### Upcoming:

26. So What If the Patent Guy Doesn't Understand?
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!

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

25. I Can't Wait for the Patent Office for 3 Years, Can I?
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 an 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](http://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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