

They're Selling Our *&^\$#%@* Design!

This Patent Stuff and My Semiconductor Business – Part 37

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.

You patented your invention, you developed your chip, you even registered its layout, and now those bloody *&^\$#%@* are selling a counterfeit chip, with your design, in the Far East, and eating your lunch!!!

What can you do, are your US patent and layout registration going to give you any recourse at all?

Well, maybe, although probably not... With your US patent and mask registration, you cannot stop somebody in China from producing a copy of your chip. And you cannot stop them from selling it in Asia either. They have the legal right to do so. You cannot stop their Asia customers from buying the counterfeit chip and putting it in their product, and selling the product in Asia, or Europe, or Canada or Mexico. Again, they have the legal right to do so, even in your own front and backyards. But, you can stop your copycat from importing the chip in the US, and you can stop their customers from importing their products in the US. They have no right to do so under US law. You can stop them by suing them. Unfortunately, suing might cost a lot of money, and you'll need to ask yourself if you'll ever earn that back.



Patents cost a good stack of money, too, but much less than suing for infringement. Then again, if you sue a competitor for infringement in a jurisdiction where you have a valid patent, you may receive a wealthy compensation for the unauthorized use of your technology. But, like so often, an ounce of prevention is worth a pound of cure. Benjamin Franklin wrote that, in 1735. A prolific inventor—from the lightning rod to bifocal glasses, swimming fins, and a urinary catheter—who never sought patent protection, feeling that inventions should be shared freely and generously. Franklin's generosity is still a great example for many inventors today. But for companies, patents are an important tool to enable innovations to be funded so that they can be fully developed, tested, and taken to the market. A patent enables its owner to invest in an innovation, and to take it from a concept to a reality.

So what about your nemesis in the Far East? What could you have done differently to get your ounce of protection?

When you develop a chip, you ask yourself a few questions:

- Where can my chip be manufactured?
- Where will I sell it?
- Who else would want to use my invention if it were unprotected?

If your chips can only be produced in Taiwan, Korea, and the US, you could patent your inventions in just those three countries. Will China and Europe catch up in the next twenty years and would they also be able to manufacture an IC like yours? Then you need to get patents there, too. However, no worries for you, if you have budget for a 5 nm tapeout, you also have budget for a bunch of patents in a few countries.

But if your chips can be produced in older technology, say 65nm, then the number of countries where they could be produced grows rapidly. Getting patents in all those countries can weigh heavily on your budget. Instead, you may look at your target market, which may be smaller. One of my customers is an innovative US company. A relatively young company with a team of really hard working very experienced and creative engineers, all working on early-stage funding. They plan a product exclusively for sales in China. Their competitors are in the US and in China. They protect inventions related to this product with patents in the US and in China.

So who would they sue if somebody else sold your prospective Chinese customers a counterfeit chip? The first target would be whoever imports it into China, but that may be complicated if their Chinese customer buys it abroad and imports it himself. They might sue, if that customer buys everything from somebody else—they'd owe that to their loyal customers. But should they sue their own customer if that customer buys half from them and half from somebody else? What if their customer buys from somebody else because my customer can't deliver as quickly or as many as their customer needs? In those cases there probably are many factors to consider. In some cases, after talking with the offending customer, they might decide to close their eyes and allow it for a while. In some other cases, they might decide to accept if the customer is willing to pay you the difference of their price and their competitor's price so that at least their playing field is level. Or they might work out some other kind of deal—if they get sufficient transparency, or if there are specific reasons to depend on trust. But in yet other cases, they might decide to take a more aggressive position. Whether they sue or not, the patent will give them leverage and bargaining power.

Of course, you may wonder whether investing in a patent in China could be effective. Will the country punish one of its own companies for infringing on the rights of a foreign company? Nobody knows how geopolitical situations may develop over time. But it would be naïve not to take Chinese law seriously. The Chinese patent system is generally in line with patent systems elsewhere. Chinese patent lawyers are as knowledgeable and capable as those anywhere else. In my experience, they're at least as good as those in the US. If your inventions are all made outside China, you will probably work with a patent firm in Beijing. If you have some of your inventors inside China, you may prefer to work with attorneys close to those inventors, for example in Shanghai or Shenzhen. In any case, if you want strong protection, you choose a strong firm.

Will that be enough to stop your nemesis? I'd like to think so.

Upcoming:

38. Aargh!! We Finally Received a Patent Office Response and Everything is Rejected!

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32. My Invention Can Be Implemented with 500 Different Circuits. Can A Patent Cover That?
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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.
7. Woohoo! I Invented a Huge Improvement over My Competitor's Invention!
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2. Developing an IP Protection Strategy for Your Semiconductor Company – PART I
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