

CES or DAC Is within Weeks. I Gotta Present and Demo There!

This Patent Stuff and My Semiconductor Business – Part 28

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.

Ah, the rush! There are so many things to do, and so few hours in a day! Writing the presentation (how many people will attend, will they be paying attention, am I going to look silly?); getting the demo to work, or at least to look like it's working (the chip only came back from packaging yesterday, we don't even know if it starts up!). And your regular work doesn't stop either. But your presence at CES, or DAC, can make your company for the next year.

Despite the long time between the start of a chip development and having a working prototype, it can happen that you have an unprotected invention right before a major presentation or demo. Presentations are probably most important, as many companies want to start raising awareness of their product quite early on. But presenting or demonstrating a product that contains your invention, whether you talk about the invention or not, counts as publishing the invention, with consequences I discuss below.

Even close to a first public demo, you may have an invention that has no patent protection, for example when the invention is implemented in firmware, but depends on some hardware that you've had for some time.

If you can't protect it in time, should you just shut up about your invention, and give your best sales talk?

Here are some things you need to consider:

• There are several ways to protect a chip invention. You can patent it, which means that you can stop others from copying, manufacturing, using, selling, offering for sale, or importing a product or method that includes your invention. You can keep the invention as a trade secret, but if a competitor reverse engineers your product, which may be completely legal, then they are free to compete heads on. Remember that getting a netlist of your chip's design is not expensive at all in some parts of the world. You can register your physical implementation results or layout (the "mask works") for a kind of copyright protection under the 1984 semiconductor chip protection act (USA, with similar laws in other countries), but that doesn't protect you from

competitors who understand the design and just re-layout it. You can also copyright firmware you write for the IC.

- Publishing your invention in most countries eliminates your rights to a patent. If you demo with a dummy and don't actually have the product yet, your sales activity might not be a publication if you can shut up about any invention. But you must consult a lawyer in your jurisdiction to confirm.
- The US gives you a grace period of one year between publishing your invention and applying for a patent (it may be provisional). Very nice, but many other countries give you zero years grace period. Unless you know the laws of all countries where you plan to apply for patent protection, just don't consider using this grace period. Protect your invention first. If you want to discuss it with a potential partner or customer before applying for a patent, it is your trade secret, and you must protect it with a suitable non-disclosure agreement.
- Filing a provisional application can help you out. If you are presenting your invention tomorrow, today is still a good time to take your PowerPoint deck and get it filed as a provisional patent application. If you have some additional material, like drawings or documentation how it works (even a copy of an email), then you can add those. Just remember that if you proceed with the patent, once the non-provisional application is filed and published, your provisional application gets in the public domain too. So, don't include stuff that you don't want your competitors to ever see.
- Another advantage of a provisional application is that you can, if you want, go back to keeping the invention your trade secret. The provisional application expires after a year. If you never file the non-provisional, then the provisional gets abandoned and ultimately deleted. At that point, nobody knows anything that you haven't publicly said, or that can't be found out from reverse engineering. If you do file a non-provisional and abandon it before its publication (which could happen after six months), then both your provisional and the non-provisional don't enter the public domain.

Taking the decision to file or not file a patent application is easy. If your invention can be exposed by reverse engineering, then patenting may be your best bet. Filing a quick provisional can be done within hours and can protect at least the information that you plan to publicly present the next day. The quick provisional can be much cheaper than a full provisional or a non-provisional application. However, it will be a bit like a raft that you quickly put together from lumber that you pick up around you. It may get you to the other side of a canal or of a small pond, but it is not going to get you safely over the Big Pond. After the show, you have to follow up soon with a better provisional or a non-provisional application, to make sure you get the best protection without holes in it.

In conclusion, act now, and you can postpone most of the thinking and actions needed to get protection until after the show. Don't postpone it long. A rickety raft is not safe. But it can take you to the other side of the canal or the small pond, and if you want, you can come back, too.

Upcoming:

- 29. Geez, One-And-A-Half Page to Describe My Netlist in One Sentence!
- 30. How Patents, Secrets, Open Source, and Reverse Engineering Help Humanity
- 31. Can't I Just Hide My Invention in My Chip?

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- 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!!
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- 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!

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