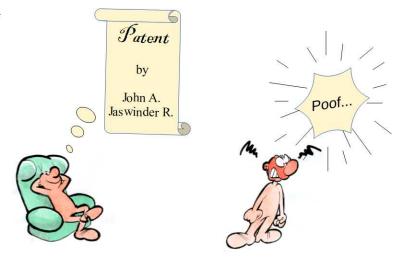
GROUWSTRA IC & Software Patent

How Do I Know My Patent Is Worth the Paper That It is Printed On?

This Patent Stuff and My Semiconductor Business - Part 40

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.

In this time of NFTs, how do you know if anything is worth anything? When people spend insane amounts of cash to buy a token that a JPEG file is "original", what does value even mean? Maybe somebody will pay an insane amount of cash for your patent plaque on the wall (the real-world equivalent of the NFT) or even for the patent itself. How could you know?



Personally, I would take the more pragmatic

approach. I wouldn't pay anything for an NFT. Whether the *Herman Brood* painting on my wall is original or not (it isn't), I care only about what it conveys. That set's me apart from (at least some) other people, but also from investors/speculators.

The value of a patent much depends on who owns it. More particularly, on how the owner uses the patent. But not necessarily only on that. A standard essential patent (SEP) is a patent that has been declared as essential for some industry standard. It can be licensed on fair, reasonable and non-discriminatory terms. The owner cannot stop direct competitors from licensing and using the patented technology. But, typically, the owner receives good money in licensing fees from multiple parties, without having to spend a fortune on marketing and sales efforts.

But most patents are not SEP patents. They may be owned by individuals, small companies, big companies, and other organizations. This is a proxy for their value. Individuals typically are not directly exploiting the patented invention. Their

best hope is to license or sell the patent to a company that sees value in the invention. Until they sell it, the patent only has potential value.

For a small company, a non-SEP patent can have value in the following ways:

- It covers core technology. It keeps competitors from copying the technology. It impacts the acquisition price
 when the company is sold.
- It covers adjacent technology that locks competitors out of using an alternative to the company's core technology. Even though the company is not using it actively, it protects the company's market, and impacts the acquisition price when the company is sold.
- It enables a strategic collaboration with an industry partner for which it might be essential.
- If a patent is not core technology, and is not used in any product or process, it provides no protection. It may still impact the acquisition price when the company is sold. However, in the run-up to an acquisition, the maintenance fees can be an unwanted financial burden.

For a large company, a non-SEP patent can have value in the following ways:

- It covers core technology. It keeps competitors from copying the technology.
- It covers whatever, or nothing. It is used offensively to keep competitors out of the market, and defensively when they are sued by a competitor for infringement. This strategy works by the force of numbers: "You want to sue me for infringing your one patent? Prove to me that I'm infringing it. And by the way, I'll counter-sue you for infringing these 250 patents!" Not nice, but it is the way (some of) the world works.

In this way, a big company can do whatever it wants and just bulldozer over the little guys. Fortunately, not every big company behaves that way, even if they could. But it shows that for small companies, the quality of the patent is essential. For large companies, the quantity of patents may matter more. For smart large companies, the quality may still be important—when it concerns core technology.

OK, so when a company is public, on its way to an IPO, or on its way to an acquisition, the patent could be worth the paper that it is printed on. But how do you know if it is worth more?

You have to read it. And consider it in the context of its owner, as above.

How do you read it? First, it helps a lot if you have a basic understanding of the technology and the industry. In the case of semiconductor patents, having a degree in electrical engineering or computer science helps a lot. In the case of artificial intelligence patents, computer science, data analytics, and/or math degrees help a lot. You need to be able to understand the potential impact of the invention on the industry. How much money does an invention save? How much additional performance can be achieved? What alternatives are there to the invention?

Once you are reading, and trying to figure out the above questions, you need to read through the Background section and the Detailed Description section. Are they vague and gobbledygook, or are they enabling you to implement the

invention? If you can't figure out how or why it would work, you got a big red flag. The patent may fall apart after full legal scrutiny. Or the invention may be incomplete, or not even functional.

Then you progress to the claims. Especially important are the so-called independent claims: "A (something) machine, comprising: ..." or "A method for (something), comprising: ..." – rather than "The something of claim 1, ...", which is a dependent claim because it refers to another claim. Out of for example a total of 20 claims, you will often find that there are two or three independent claims.

Read the independent claims.

OK, the language may be a bit weird, and even violate basic English grammar. You will find that the claim is exactly one sentence. Is it understandable? Is it clear? Does it clearly relate to a figure, and to text that you read in the Detailed Description? How long is that sentence, 50 words or 500? The fewer words, generally, the broader the claim, and the more words, the narrower the claim. The claim will list a number of limitations. As a non-chip example, "An automobile with hexagonal wheels and orange windows" has two limitations. But "An automobile with an engine, hexagonal wheels and orange windows" practically also has two limitations, since every car has an engine. The more limitations you have stacked on top of each other, the narrower the claim is. Even so, the car with hexagonal wheels and orange windows is unlikely to impact a lot of the market, and thus a pretty narrow claim. It may not have a lot of commercial value, and as a consequence, the patent may not be worth a lot. Once you have determined that the claim makes sense, the Detailed Description enables one to implement the invention, and the invention as claimed will save the owner or its customers \$250M in its first year, you will have some idea of its value. If you found that the claim makes no sense, the Detailed Description is not enabling, and the invention as claimed will save the owner or its customers nothing (and will earn them nothing) you will also have some idea about its value.

Upcoming:

41. Can I Be Forced to License My Invention to a Competitor?

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