Patents and Intellectual Property

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Overview of Intellectual Property (IP)

Types of Intellectual Property:

- Patents
- Copyrights
- Trade Secrets
- Trademarks and Service Marks

Issues to consider for all IP:

- Where are you covered (which countries)
- Cost of acquiring and maintaining the asset
- How will you use the asset
- Which laws govern
- What "really happens", vs. what should happen
- Unfair Trade Practices
- Tax consequences
- Licensing issues

For most "technology based companies", patents and trade secrets are the primary IP of interest. Patents are protected by law; trade secrets are your problem (poorly protected by law).

The realities of patent law are constantly changing. They result from forces between inventors and infringers, both of whom can hire lawyers to plead their cases. Be careful to get a good reading on this climate, before relying on a patent for anything.

Rule: "Do not base your business on the strength of a patent. The law is often poor protection."

What is a Patent?

Fundamental rule to never forget:

"Patents protect you from honest people".

What is a patent?

1. Grant from the US govt. for an "exclusive" right to make and sell the product for 20 years after the date of application.

   After 20 years, no protection

2. To retain this right, you now have an obligation to make "reasonable efforts" to "bring it to market" in a "reasonable time" (in the past you did not in the USA)

3. To get a patent, you must demonstrate:

   A "novel" invention. The test is "would it be obvious to someone well versed in the art".

   It must "teach" someone how to practice the invention.

   You do NOT need to demonstrate that it works, except for perpetual motion machines.

Why get one

1. Gives you a competitive edge in the market, leading to higher margins, or bigger market share.

2. Protect the company's R&D investment, or new product. This assumes that the company is ready to market, make, and sell, and the patent gives them some protection

3. You blundered and "started the 20 year clock" accidentally, and you have no choice but to get one now or loose the opportunity.

4. Defensive claim to "invention space". I.e. you might not use it but your patent might keep a competitor out of the particular invention space for a while. You will not pursue infringement.

5. Ego strokes for the inventor. (Typically, engineers fantasize big bucks from a patent. However, be aware that your company owns the rights to any invention you make. Most patents (probably 90%) never make money for the owner.)

6. (Previously) Intellectual Property, especially patents, can be used to depreciate "goodwill" if a business unit is sold. Today, in the USA, this is not so important, as goodwill can now be depreciated.

7. Provides a vehicle for license income. "Used to trade patents"

Why to not get one

1. No active plans to market product. Here your best protection is secrecy.

2. Can't detect the use of the invention by your competitor. This is why "process" patents are effectively worthless.

3. Insignificant value. (The cost is not justified, or the competitors don't care).

   - Never underestimate the force of NIH (not invented here) at your competitors for small improvements.

4. Your patent will "advertise" a value that might not be detected otherwise.

5. You have better protection through secrecy, or confidentiality agreements with customers.

   - Remember that ANY patent fight can cost $1,000,000 (minimum). The first priority of all patent lawyers involved, (yours and the infringer's), as well as the Judge, is to be sure you spend this money.

6. A competitor can drag you into a lawsuit, even if you don't want to fight, unless you are VERY careful not to accuse him of infringement.

What a patent does and doesn't do

1. Can restrict your "invention space".
   - Difficult for you to "expand" later with small improvements.
   - It is easy and normal for your competitors to patent small improvements.
2. Getting a patent does NOT mean that it is a valid patent!!! Getting one takes only $ and perseverance
3. The examiners in the US don't like confrontation, and often adopt the attitude of "let the courts decide".
4. It does not prevent someone from copying or infringing.
   - The size of your "$ war chest" will prevail, plus your willingness to use it.
   - If you have a "significant" invention, which affects your competitor's ability to compete, THEY WILL INFRINGE!
5. Does not mean that your patent does not infringe another patent
6. Your customers may encourage your competitors to infringe.

What you can patent?

1. Realistically, only a PRODUCT that you wish to sell.

   - Has to be an improvement over "obvious art"
   - Has to have commercial value (now or in the future)
   - Should be worth the cost.
   - Must be truly "novel", i.e. does not infringe another patent.

2. Alternatives to a Patent.

   - Trade secrets - Keep your mouth shut
   - Confidentiality agreements
   - Long term supply agreements
   - Being the low cost market leader.
   - Publish the idea. Put it in the public domain

3. Some Special Notes

   - Today, companies and people are patenting "everything". There have been some changes to the US patent law.
   - These patents may not be upheld, but they are making business difficult, especially in the Internet space, where they are untested.
   - You can use a "worthless patent" to abuse a competitor with the legal process. (Especially if you can afford it, and he can't)

What are the requirements to get a patent?

1. You must describe the invention.

2. Must disclose a "preferred embodiment", which is usually the first part you made.

3. You must clearly state what features you claim. This is the most important part. How you write these claims can have a major impact on the strength of the patent.

   - First is a "main claim", which claims as much "invention space" as possible.

   - Subclaims which are "fall back" options to a more restricted invention space (usually forced by prior art or the Patent Office)

4. You must have a drawing that shows the claimed features of the invention

5. You must file (in the USA) within one year of your first "offer for sale" of the invention.

6. You must have a filing date in Europe and Japan either:

   - Prior to ANY public disclosure of the invention,
   - Or within one year of a US application, prior to any public disclosure.

What are the costs to file, and how long will we pay the fees in each country?

Rough costs ($k): (CY2000 $US)	Outside Legal Cost to get a patent	Lifetime Maintenance fees
1. USA (get first)	$ 20.	$ 5.
2. Europe (PCT plus eight countries)	$ 60.	$ 60.
3. Japan	$ 10.	$ 130.*
4. Korea	$ 10.	$ 19.
5. Brazil	$ 10.	$ 12.
6. Australia	$ 10.	$ 10.
7. Others (typ.)	$ 10.	$ 10-20
Totals	$130	$245

Grand Total $375 K

The "fees" are paid to the Governments of each country, over the life of the patent, to "keep it active". If you don't pay, you loose protection.

Fees in later years are always more expensive than early years.

These costs DO NOT include your internal costs, NOR do they include any "Defense" costs. Total outside costs, full coverage, are probably over $400,000 - $600,000 for a “Worldwide” patent.

* Actual fees are related to number of claims in some countries, especially Japan. This figure for Japan is correct for the “US practice” of lots of claims (e.g. 30). For 1 claim, this cost is approximately $60K.

Unintended Consequences of the Patent Process

General consequences

- You will spend a lot of time on "paperwork, notebooks, reviewing gibberish."
- Your respect for the legal system will not improve.

Specific Consequences

- If you get involved in a patent fight, your competitor has access to ALL of your documents (related). (Except privileged correspondence with your Lawyer). This can be especially bad if they know what to ask for. By law, you must give them ALL documents. Be careful what you commit to paper. Do hygiene on your notes before any fight.

- If your patent has flaws (offer for sale, disclosure, language, etc), and you know about these flaws and still prosecute a patent, you have potential liability to the infringer. (e.g. Sperry Topsider)

- If you fight a patent and LOSE, your licenses may become invalid, costing you still more money.

- The "80-20" rule (also known as the OJ rule) says that you can have a "rock solid patent", and still have a 20% chance of it being found invalid, and no more than an 80% chance of winning in Court. On the other hand, you can have a completely worthless patent, with all sorts of prior art out there, and still have a 20% chance in a lawsuit, especially against a "big company". Hence "Lemelson".

- Most patents are "in between". The best chance of winning a lawsuit is probably 70%, the worst 30%

Defense of a patent

If you try to defend a patent, you must prove several key issues. The infringer will aggressively attack on each of these issues. These include:

1. The patent is not "obvious" or identical to any prior art.

2. The patent does not infringe some other patent. (it can be an improvement)

3. You have not offered it for sale more than one year before the filing date. (Opening a whole can of worms as to what constitutes an offer for sale.)

4. You have not publicly disclosed the invention before the filing date (non-US).

5. An infringer is actually offering this for sale, AND you have suffered damages as a result.

6. You have not acted in an inappropriate manner, such as threatening the infringer beyond the scope of the patent.

7. You did not mislead the examiner

8. All prior art was known to the examiner

You can fail on any one of these issues, 1-4 will invalidate your patent, 5 will kill the suit, and 6 and 7 can cause you liability.

Remember the OJ rule, (0.8)^8= 0.1

Some rules and important points to remember

1. Customers will often conspire with your competitors to invalidate your patents

2. If you have a violation in the market, and you do not "actively pursue" the infringement for a significant period (e.g. 6 years), you effectively lose your rights

3. When you wish to sell a company or division, at a premium over book value, patents can accelerate the depreciation of goodwill.

4. European patents DO NOT have to have the same claims as the US parent patent. You have an opportunity to change claims up to issue date (often 3-5 years after it issues in the US) Use this to fix any problems that come up.

5. The legal lottery CAN be in your favor. A successful strategy for many businesses is to get a patent, and sue everyone you can. It sometimes works very well.

Special Notes for Foreign Filing

Foreign in General:

- Patent Cooperation Treaty (PCT) allows you to file once and cover a bunch of important countries, such as all Europe, and Japan. Must file within a year of US filing date.

Process in Europe:

- Takes over 4 years from US filing
- After Patent is allowed, the patent is published, and a 9 month period for opposition, when anyone can file against it. If no opposition, it will issue.
- If opposition, there is a hearing before the patent board. Successfully overcoming an opposition strengthens a patent.
- Rejected patents will still show up at customers', since there is no publishing of the rejection.

Process in Japan:

- Takes 9 years, typically
- Patent is published early in the process. Opportunity for "home" companies to "patent around you" or to patent "improvements"
- When it issues, often of low value, or you are boxed in, and can't produce.

Rules of lesson 10: Patents and IP.

1. Patents protect you from honest people

2. Patents cost A LOT of money. They are hard to defend. Be careful about how much you spend.

3. If a competitor needs your invention to be competitive, he will infringe.

4. Your customers and competitors will sometimes conspire to have your patents invalidated.

5. When you sell your business, you need those patents.

6. Remember the OJ rule: "Your best chance in court is 80%, your worse 20%".

7. Be very reluctant to pursue the defense of a patent through the legal process. Be aware of your risks, they are substantial.

8. Be careful of, and know, the date of your first offer for sale.