

Patent Strategy: Lessons from the SuperSoaker™

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The Common Wisdom on Patents

- **Patents are critical to R&D investments in a few industries (e.g., pharmaceuticals, biotech and medical devices)**
 - these firms rely on patents to block competitive entry for many years
 - this effective patent protection allows firms to spend years & 10s or 100s of \$millions on the R&D of individual products
- **Patents are less important in most other industries (e.g., consumer goods, software publishing, consumer electronics and automotive)**
 - patents are generally much less effective at blocking competitive entry in these industries
 - unless you have a ton of them!
 - patents are often still worth acquiring in these industries, since they impede competitors to some extent
 - but patents are not the primary barrier to competitive entry, and thus they usually don't play a major role in R&D investment decisions
 - although firms may invest in developing a large portfolio of patents

Goals for the Talk

- **Not to challenge the common wisdom**
 - even though it's an oversimplification
- **But to talk to you about patent strategy in a way that's crosses the divide between industries**
- **To help you think through your patent strategy for individual product development projects by**
 -
 - understanding what makes patents more or less effective at blocking imitation in any given field
 - knowing strategies to acquire more effective patents, particularly in fields where patent rights are usually are a major line of defense against competitors

What is a patent?

- **Patents**
 - disclosure in exchange for exclusive right to make, use and sell the invention (as claimed) for 20 years from the filing date
- **The alternative is trade secrecy**
 - indefinite protection from misappropriation
 - for information that (1) is not generally known or readily ascertainable, (2) is subject to reasonable efforts to maintain secrecy, and (3) has economic value derived from its secrecy

What can be patented?

- **Novelty**
 - all elements – you're looking for a point of novelty
 - species-genus rule
- **Nonobviousness**
 - legal test: the invention would have been obvious to someone of skill in the art at the time of invention
 - it's harder to patent inventions in crowded fields because there is more prior art
- **Patentable subject matter**
 - legal standards in flux after *Bilski* (2010), *Mayo* (2012), *Myriad* (2013), and *Alice* (2014)
 - no protection for anything that exists in nature (*Myriad*)
 - for diagnostics, software & business methods, you want a hardware connection

What can be enforced?

- **Is your patent broad enough to cover the competitor's products?**
 - prior art limitations on scope
 - design-around threat
- **Can you detect infringement?**
 - harder for processes, particularly if they occur behind closed doors or require multiple parties to perform
 - harder for products that can be used without physically entering countries with strong IP laws (like the US)
- **Do you have the time and resources to enforce your patents?**
 - attorney fees for patent litigation usually run in the \$millions
 - litigation takes years to complete
 - requires the attention of company leadership and R&D employees

SuperSoaker™

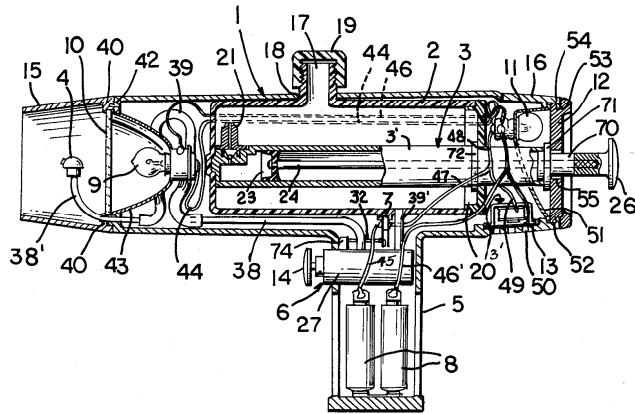
- **Originally sold by Larami (now by Hasbro) in 1990**
- **Pressurized chamber was a breakthrough in squirt gun tech**
- **Sold over 2 million units in 1991**
- **Entered the toy hall of fame in 2015**



SuperSoaker™ was the second entrant

- **A 1978 patent covered this same basic squirt gun design**

U.S. Patent No. 4,239,129 (bracketed words supplied; see Diagram).



- **Talk To Me Products held that patent, and sold a competing squirt gun called “American Gladiator”**
- **Talk To Me Products sued Larami for patent infringement**
- **But Larami beat the rap**

Why did Larami win?



‘129 Patent Claim 1

***- A toy comprising
an elongated housing [case] having a chamber therein for a
liquid tank,
a pump including a piston
having an exposed [piston rod] and
extending rearwardly of said toy
facilitating manual operation for building up an
appreciable amount of pressure in said chamber
for ejecting a stream of liquid therefrom an
appreciable distance substantially forwardly of said toy,
and a means for controlling the ejection.***

A Successful Design Around



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So, what do you actually get from a patent?

- **Patents provide a legal right to exclude others from making, using or selling your invention**
- **but that right is only valuable**
 - **if the competitor's product falls within the scope of your claims**
 - **if your product is successful, competitors will likely try to design around your patent**
 - **preventing this is harder than it sounds**
 - **limited technological foresight**
 - **prosecution history estoppel**
 - **attorney costs for patent(s) of unknown value**
 - **if you can catch the infringers**
 - **if you can afford the time and expense of litigation**

When is strong patent protection available?

- **External constraints on design-arounds**
 - FDA regulations in pharmaceuticals
 - FDA regulations in medical devices (to a lesser extent)
 - standard-essential patents
 - dominant design patents (?)
- **Ease of detecting infringement**
- **Monetary stakes are high enough to justify enforcement costs**

If strong patent protection is available, then ...

- **Make patent acquisition a strategic priority**
 - **Know exactly what you need to patent**
 - **i.e., what your competitors must copy to enter the market**
 - **Invest in patent prosecution & acquisition**
- **Make patent enforcement a strategic priority**

If strong patent protection isn't available, then ...

- **You can often get moderately strong patent protection**
 - **Use a portfolio strategy (get ~ 5-10 patents, each one covering a different aspect of the technology)**
 - More patents covering different aspects of your technology = higher design-around costs & higher risk of infringing at least one patent
 - But this costs \$
 - **Help patent attorneys draft claims to avoid design-arounds**
 - Increase competitors design-around costs by avoiding easy design-around strategies
 - But this takes up your engineers' time
 - **Use continuations to keep a patent application on the invention pending even after the first patent issues**
 - Opportunity to change claims to cover some design-around strategies
 - But this costs \$
 - **Leverage trade secrecy as a complement to your patents whenever possible**

This is the standard advice given to patent applicants

Beyond the Standard Advice

- **Don't rely solely on your engineers & patent lawyers to decide what to patent**
- **Engineers focus on the technology**
 - they usually want to patent the most creative and novel aspects of the product you're developing.
- **But your goal isn't to patent the creative technology they made**
- **It's to block competitors from your market space**
- ***Your goal should be to patent anything you can that competitors must do to enter the market***
 - write up a list of everything a product must have or do to compete successfully in your space
 - involve the product development manager & the other business-oriented employees working on the product, not just the engineers
 - then work with your patent attorney to figure out what you can patent on that list

Thank You