HOW STRONG ARE YOUR PATENTS?

Simon Jelley, head of innovation and Tom Copeland, senior consultant at 42 Technology, look at common errors made in protecting patents.

If you're a technology entrepreneur or an SME then applying for patents can be a great way to appear inventive, to attract investors, or to take advantage of tax breaks like the UK's Patent Box scheme. But for larger companies the motivations are different. In their case, building an IP portfolio is much more about protecting sales revenue and market share:

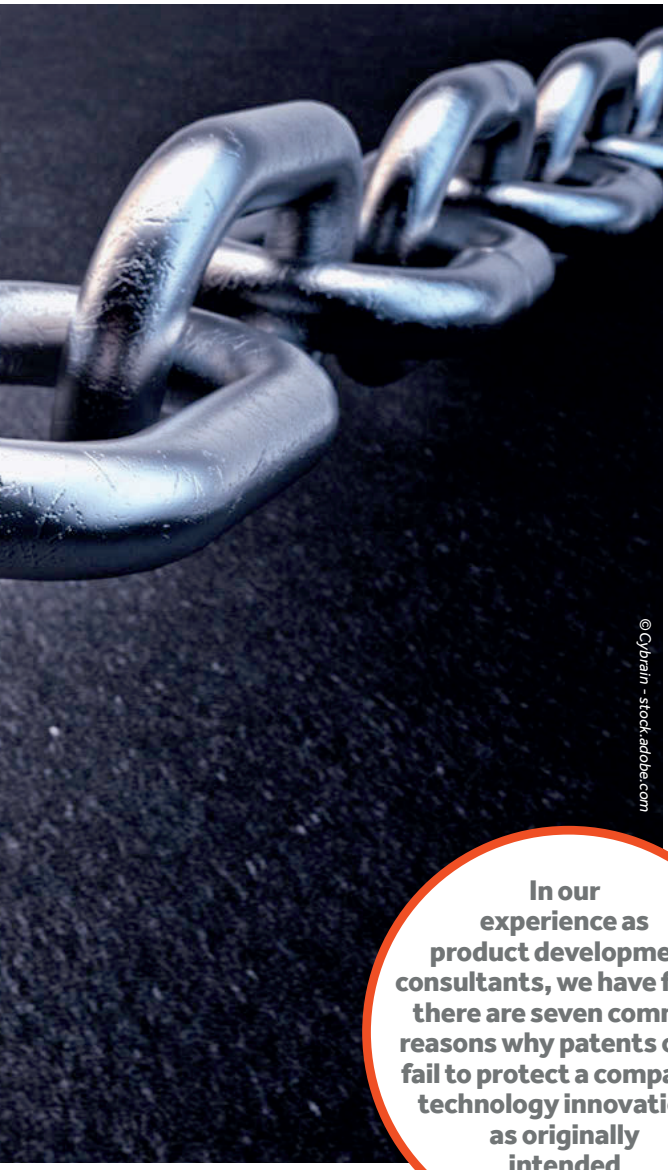
- to prevent products being cloned, particularly when manufacturing in the Far East;
- to discourage or delay fast followers by driving up their development costs;
- to prevent competitors that might otherwise follow them into an emerging market; or
- to close a system so that consumables can be tied-in (such as printer cartridges).

SIMON JELLEY

Head of innovation at 42 Technology

But it is worth thinking about how patents actually discourage competitors because the number of patent lawsuits that go to court is very low. In fact, the litigation rate between 2007 and 2016 – the number of cases going to court versus the number of new patents granted – was less than 2%. So, although most patents never have to face a legal test, they remain an effective barrier in creating the fear of infringement.

However, there is an alternative explanation for why lots of patents never get tested in court. When a company discovers a competitor has just launched a product into their market, they rush to check their patent portfolios, and then realise



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that what's just been launched doesn't actually infringe their patent. The company's patent is still a legitimate piece of paper, but it is no longer effective in protecting their position. In our experience as product development consultants, we have found there are seven common reasons why patents often fail to protect a company's technology innovations as originally intended:

NOT PROTECTING THE INVENTIVE STEP

In some cases, technical teams spend so much time developing a particularly technically-challenging aspect of a new product that they fail to spot that that wasn't actually the inventive bit when briefing their patent attorneys.

TOM COPELAND

Senior consultant at 42 Technology

NOT PRIORITISING KEY FEATURES

Although patent attorneys are skilled and experienced in delivering a good claims structure, they rely on the technical team to correctly articulate the significance of certain features. If those details are not properly communicated then the patent may end up with a claims structure that under-protects key features. Or, it may have a claims structure that unintentionally makes it easier for competitors to design around it.

FOCUSING ON SPECIFIC EMBODIMENTS

One of the most common mistakes is making the patent so specific that it protects a specific embodiment of a product, not the enabling technology. For example: if a patent attorney had been told that a particular invention had been designed to have two magnets (when one or three would work equally well) and didn't challenge the technical team, then that feature could end up going into Claim 1. However, all the fall-back options would then be killed off when a competitor gets a similar product working with a different number of magnets.

AMENDING DESIGNS AFTER FILING

If the product design changes, then it's important to ensure the patent protects the current invention rather than an earlier version of it. Otherwise a competitor no longer needs to come up with anything particularly inventive to get around it. In fact, they can just clone the product (material for material, and dimension for dimension) because the patent isn't for the product that's available.

USING WRONG NUMBERS OR DEFINITIONS

If a patent attorney is accidentally given the wrong dimension or specification for something, which becomes referenced in Claim 1, then all claims will be undermined. So if the technical team provides an internal diameter when it should have been the external diameter then the main claim (and all dependent claims) fails to apply to the product.

NOT CONSIDERING ALTERNATIVE APPROACHES

Sometimes patents are written simply to protect the specific way that the problem was solved, and companies don't consider or patent alternative approaches that competitors could exploit to achieve the same result. It's also worth remembering that while another technology might not be ideal for the company itself, a competitor might take a different view because of its suppliers, distribution channels, manufacturing partners, and so on.

BEING TOO INDUSTRY-FOCUSED

Even if they are not immediately on the company's horizon, it is worth thinking through all potential applications and markets for a new technology. For example: the scope of a patent might be unintentionally narrowed to include, for example, all food and drink applications, when it could also be a multi-billion-dollar technology in pharmaceutical manufacture.

Closing holes after a patent has been filed, or even after product launch is often still possible, but it is always more challenging and expensive. However, it is one of the areas where involving an external product design consultancy can be invaluable in bringing fresh perspectives, as well as experience in analytical tools (such as TRIZ and MECE) and the use of structured innovation processes. In the case of patents, where the constraint for mapping new ideas is the patent itself, the design team could help to identify alternative approaches and workarounds to deliver the required functionality without infringement. And, of course, those ideas or technologies could originate from outside the company's own industry or areas of expertise. Having identified any weaknesses within its core patents, what a company then does will depend on its own situation.

However, one option is to introduce new filings with scopes that can close any loopholes before a competitor discovers them and decides to develop a competitive offering: safe in the knowledge there is no risk of being sued or becoming embroiled in infringement proceedings.