BY **MIKE WOOD**

Intellectual Property
Part 4, Patents *continued*

LAST TIME IN THIS SERIES ON INTELLECTUAL PROPERTY we covered some of the basics of patenting. This included the rights you get from owning a patent, who can apply for one, the kinds of patents, and some discussion on the three basic requirements: useful, novel and non-obvious. Earlier articles in this series covered copyrights and trademarks.

In this article we'll continue this look at patents and consider the possible reasons for owning patents, routes to applying for them, the differences between US patents and overseas patents, and patent licensing.

As I've mentioned before I should make it clear that I am not a lawyer so nothing I talk about in these articles is legal advice. The articles are based on information I've picked up over the years and found useful based on my personal point of view as a product designer and developer in our industry. Because of that my comments are undoubtedly somewhat selective and subjective. In no way should you take anything in these articles as more than useful (I hope) background information to assist further research. As with any legal matters if you have a real problem or concern always talk to a real attorney!

> **"So, why would you want a patent in the first place?"**

Why do I want a patent?

So, why would you want a patent in the first place? We talked earlier about the rights you get from owning a patent which, to recap, are complete exclusionary. That is they give you the right to exclude someone else from using your invention. What they don't give you is any guarantee that you can make a successful and money-making product out of it. In fact less than 5% of patents end up as even marginally profitable products. Not great odds and not necessarily a good way to gamble your money.

In reality people and companies obtain patents for a variety of reasons, to license and make money of course, but also to act as a deterrent to competition and to give the owner a bargaining chip to trade with. (Remember that Intellectual Property like personal and real property can be bought and sold.) Often these days inventors will patent products as a way of making it clear to the world that they consider the idea to be theirs thus stamping their mark on their territory in a defensive manner.

The defensive argument makes a lot of sense—there is a great deal of controversy in the US at the moment in many technology areas over the merits or otherwise of patents and their real value and significance. One approach to the proliferation of patents and protection against possible predatory action by others is to own some patents yourself. That way you are not completely defenseless and have IP of your own to trade and barter. This is the approach that, for example, many large electronic component manufacturers have taken over the last few years. The large players in that field all own hundreds of competing and interlocking patents. They trade these with one another all the time and very often avoid any license fees changing hands at all. It's become a method of sustaining the status quo.

If you are lucky enough to own one of that tiny percentage of patents describing a successful invention then you may well want to license and earn some revenue. This is precisely what patents are supposed to be about and why they exist at all—a patent is supposed to facilitate the spread of new inventions and ideas, not stifle them. The license is a means of exploiting an idea while ensuring that the original inventor gets properly rewarded for their creativity. There's nothing wrong with the concept—paying a license fee allows a manufacturer to get immediate access to a technology they need and could save a lot of money in research. Because license fees are commonly based as a percentage of sales of the resultant product it is in everybody's best interest to make the product a success. A successful product means good sales for the licensee which in turn, means good license fees for the inventor. It should be a win-win situation. Bottom line—don't be afraid of licenses. A good, sensible license can be a profitable and legitimate way of developing new products.

Keep your mouth shut!

So let's assume that you have had a great idea, you've tested it out and it looks like it's going to work. You think it meets the criteria and is useful, novel and non-obvious and you want to patent it. Where do you start?

The first step is, paradoxically, to keep quiet about it. Once an idea is freely released into the world it may no longer be possible to patent it. There are different rules in different countries but, essentially, the US operates under a 'first to invent' system while most of the rest of the world operates under a "first to file" system. What this means is that in Europe or elsewhere if you are the first to file a patent application for an idea then you are recognized as the inventor —clearly this means that the idea must have never been disclosed publicly before the filing.

In the US there is an important difference. Here it is the "first to invent" an idea that is awarded the patent. This, on the surface, sounds fairer but, in practice, leads to a huge amount of argument and litigation about who invented something first. Because of this "first to invent" rule the US Patent System may allow a grace period for public disclosure of up to one year before the application is filed. First to invent may seem fairer but, in practice, first to file is a lot easier to adjudicate.

However, even if you are only worried about the US, it's still best not to publicly disclose your invention unless you can't avoid it or you see a clear marketing advantage by doing so. It is nearly always better to keep new ideas under wraps until the patent application is filed. Showing your idea to someone in your own company may not count as public disclosure and you can still show it to potentially interested third parties by asking them to sign a Non-Disclosure Agreement before revealing anything. If you have any thought at all about filing a patent outside of the US then you must keep your idea confidential.

Now is the time you should decide if you are going to do the work yourself or hire a patent attorney to assist. Filing a patent is a complex process, much more difficult than applying for copyright or trademark protection, so I would have to strongly recommend that you consider using an attorney. By all means work closely with the attorney and try and write some of the text in the patent application yourself (nobody else knows your invention as well as you do) but don't try and file without at least having an attorney read and comment on your work. There are a lot of pitfalls and places to trip up and it only needs one or two incorrect words to turn a valuable patent into a worthless one.

Prior art

The next step is to ensure that you have a novel invention with no "prior art" anticipating it. This means searching both the field of the patent—its products and history—as well as existing patents. It is likely that you will have a good feel for prior products and already know what's going on with competing products. It is less likely that you will know of prior art patents. As stated earlier less than 5% of patents make it out into the big wide world as successful products; this means that most patents never see the light of day and it is possible that another inventor has already patented an idea similar to yours but, because it wasn't ultimately successful, you've never heard of it. The age of the internet and searchable databases has made this research much easier—you don't have to scan hundreds of dusty volumes in a library any more. You can get a good start yourself by using the search engines at the US Patent and Trademark Office www.uspto.gov, however it's still not a trivial task and you may want help from your attorney.

Assuming the preliminary searches don't turn up any surprises you can start to draft the patent—this is really where expert help is essential. The invention will need to be described, drawn, and documented in precise language with carefully drafted claims accurately covering the areas you believe are novel. Not too broadly so as to open up more prior art and not so narrowly that a competitor can easily sidestep them with some minor alterations.

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The protection afforded by a patent is comprehensive—it essentially accords the owner a monopoly on the invention—but those rights don't come cheaply. The actual cost of filing a patent varies hugely depending on the complexity and time needed to draft the application. However you should go into it assuming that it will cost at least $5,000 and possibly $10,000 or more. And that's only for one country! Patents, like copyright and trademarks, don't cross borders and you will need to explicitly file in other countries if you want protection elsewhere. Each of these countries requires its own application and must meet that nation's specific rules and regulations—all of which are different of course. Taking out a world-wide patent in this way can be prohibitively expensive so many inventors in this industry choose to only file in the US and perhaps one or two other countries in Europe or elsewhere. This is not unreasonable in a niche industry like ours—because the entertainment technology market is relatively small and intrinsically global it is unlikely that a manufacturer would bother producing something if they didn't have access to both the US and European marketplaces. Patent protection in the US alone may actually be enough for many companies.

International patents

If you do decide to apply for international patents then you should get some help—the US, Canada, most European and Australasian countries, and many others (around 115 countries in total) are signatories to international treaties on patents—the Paris Convention and the Patent

Cooperation Treaty (PCT). These treaties help ensure that all signatories will accept paperwork produced by each other in patent applications and will accept the first filing in any of the countries as assigning a priority date in theirs. The PCT also provides a centralized filing system which reduces the amount of paperwork needed—at least in the early stages of an application. You only get these rights if the correct paperwork is completed —get an attorney to help!

If you have any thought at all of applying for overseas patents then you should seriously consider taking out a PCT application at the same time as your US application. It doesn't cost much more at this stage and it keeps your options open as long as possible. The process gives you up to thirty months to determine if it is worthwhile proceeding in each country.

As we said last time, applying for a patent is not a quick overnight process. It will likely take three to six months to prepare the application and file, and then eighteen months to two years to actually go through all the examination stages and issue. During this examination by the USPTO it is likely that you will have to answer many questions and amend your document to meet the requirements of the patent examiner. It is a very rare application indeed that doesn't get altered and edited somewhere in the process. You do, however, get a long time to exploit your invention.

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A standard US patent currently has a life of 20 years from the filing date. During that life there are maintenance fees to pay at the 4, 8, and twelve year points. These aren't that high, but can come as a shock if you aren't expecting them and failure to pay will result in the patent expiring early.

Patents are by far the most complex of the three forms of intellectual property we've discussed so far and are the form of IP most people think of first. The money and time that can be spent and wasted on patents is large, so think carefully and get advice before entering these waters.

Next time we'll talk about the last type of intellectual property, trade secrets. What are trade secrets? Why are they different from a patent and when are they appropriate to own? ■

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