

Key advisory issues

Protecting and commercialising patentable intellectual property

According to the US Patent and Trademark Office, 97 per cent of patent holders own patents that will never make a profit and only about three per cent of all patents ever make more money than the patent cost in the first place. Assuming this is true, the overwhelming majority of inventors are left nursing their shattered dreams and depleted bank balances.

This begs the question: why is failure to commercialise effectively so prevalent? In no small part, it is because successful inventors need a wide range of skills – including the ability to juggle invention, finance, business planning, marketing, legal and safety regulations, manufacturing issues and, of course, product design – and this holds true for all classes of inventor, from large corporations to innovative individuals.

Obviously, it is easier for corporations to find the financing to begin a structured process to commercialise their intellectual property, but the costs and complexities are hard to avoid for them as well, since the whole process involves the deployment of niche skills and an independent vision which may not exist in-house, even within large corporates. Individuals and small enterprises will need to identify appropriate external expertise to ensure the proper level of protection and support for commercialisation.

If patenting is to be part of the process, there is a lot to be said for retaining the best available or affordable patent agent. A good patent agent will naturally be able to prosecute the patent process effectively and will also have good industry knowledge in the relevant technology or markets to which the invention applies.

In PricewaterhouseCoopers' experience, commercialising patentable properties normally generates the need to restructure the patent claims and/or file new applications in various jurisdictions. Drafting time, translation costs and the process of dealing with multiple claims at multiple patent offices can quickly escalate costs.

Ideally, the patenting process should be done with one eye on protection and one eye on commercial exploitation, as these two forces tend to generate conflicting requirements that require a skilful balancing act. Crafting a good claim set is a case in point. Claims should be broad enough to cover all the relevant applications of the invention without being difficult to enforce. A claim set that covers too broad an area can be more easily attacked in court, but a narrow claim set, while being more enforceable, more easily allows for 'workarounds' with only minimal re-engineering of the idea.

To optimise a well-structured commercialisation process, it is important that your commercialisation advisers or market partners liaise with your patent agent. In our experience inventors, and sometimes their counterparties (those entities with which our inventor client is trying to trade), may become very excited at inventions that 'change how the entire industry works', while financiers claim that they want to leave the room if they even hear the phrase 'paradigm shift'. Truly disruptive technologies will have a harder time entering the market, as wealthy and powerful incumbents typically fight against them. Should this occur, we advise our smaller inventor clients to craft their claim sets and plan their approach in such a way that they can conclude some smaller bilateral deals in a part of the value chain that does not immediately threaten the incumbents, thereby establishing a position of strength from which to negotiate.

Careful timing of their approach to the market is another important consideration for inventors and their advisers. A successful tactic sometimes used by pharmaceutical companies is to ensure that the filing process is managed such that patents are not published until market demand for the product is measurable, thus enhancing the value of the patent and maximising licensing revenues.

As an asset class, intellectual property lends itself to several commercialisation structures – licence, sale,

staged payments, per-unit/user or percentage of revenue. Consequently, deal structures could range from a straight asset sale or one-time upfront fee exclusivity through to pure royalty deals at the other end. The latter clearly de-risks the transaction from the point of view of both parties, since the inventor gets paid out of revenues and the licensee can judge just how successful the patented technology is in the market.

In a growing market – especially one that could be stimulated by the invention – a royalty deal would always seem to be a good idea. However, some companies steer clear of such structures, instead establishing a ‘no royalties’ policy. In our experience, such companies prefer to purchase intellectual property outright, thus avoiding the potential overhead of having to deal with auditors as well as the need to calculate and report applicable revenues. Sometimes when an invention is bundled with services or other technologies, applicability of revenues can become highly debatable and some companies simply do not want to give out their data.

When approaching the market, it is always tempting for inventors to begin by researching the market size, assuming that their invention will capture X per cent or stimulate Y per cent market uplift. It then becomes simple to calculate potential revenues and to extract from those a modest royalty upon which to base a valuation. Unfortunately, however, valuation is a highly subjective business. Even in relatively straightforward situations, finance professionals can argue long and hard about the most appropriate discount rates to use in taking into account the time-value of money and the most appropriate comparable assets or companies. Things get more complicated in the valuation of intangible assets since good proxies for comparison are difficult, if not impossible, to come by.

In short, when it comes to valuation, the message is: don’t try this at home! In cases where individuals have valued their own intellectual property, we have seen a history of over-valuation (a process known by approval committees as ‘making money in Excel’) – understandable, yes, but nevertheless likely to alienate the market. In addition, companies that want to reject an approach from an inventor who has provided them with a valuation can usually find all the arguments they need through a conservative interpretation of the market assumptions and/or a higher discount-rate comparator. It is best not to give them the ammunition.

There are instances, too, where market dynamics hardly matter. Typically, if an individual inventor were in a position where companies were scrambling for market position – and were already infringing on his or her patent in the process – this would gladden the patent

holder’s heart, since infringement is incontrovertible proof that the intellectual property is ‘hot’. However, when approaching the market the inventor should note that target counterparties sometimes prefer to litigate rather than pay up – which sets an upper limit as to how much they will be prepared to pay for the safety of a licence. In our experience, this figure is usually slightly less than their litigation budget. Large cases can take years to settle and can cost litigants millions.

Litigation is a deep-pockets game. If inventors do not pose a credible litigation threat, companies may prefer to drag out lengthy negotiations and/or court cases, knowing that they can outlast any individual or small enterprise. *NTP v Research In Motion*, a case that threatened to shut down Research In Motion’s entire BlackBerry wireless email service in the United States, is a prime example. After six years of litigation, there was finally a settlement of \$612 million. Alas, by the time the case was finally settled in March 2006, the inventor had been dead for two years.

Notwithstanding NTP’s eventual success in the courts, there are other reasons for inventors to avoid the ‘big bang’ option unless they have very deep pockets or wealthy backers, including the aforementioned difficulties of getting market-disruptive products or technologies adopted by a market that is largely driven by the vested interests of the larger incumbents.

A licensing programme that begins with smaller non-exclusive deals will be more likely to slip under the radar, making it less likely that the incumbents will stand and fight. Further, there may be circumstances where undertaking a licensing programme would be preferable – an approach that allows the patent owner more opportunity to follow the market as it (hopefully) expands.

Such a programme also allows for the tactic of agreeing publicity rights in the use of the licensees’ names. Once a non-exclusive licence is signed, the next target on the list will have a more pointed calculation to make: if mega-corps A, B and C have already signed up for a licence, it is likely that the technology or product is good and is adequately protected, and the patent holder now has a fighting fund. The drawback? Quite simply, this approach takes more time, more effort and more money. Many patent owners prefer to adopt the simpler approach of selling their company or its assets (depending on tax considerations) and retiring to their tax-haven abodes.

As many of these issues stem from the individual patent holder’s lack of fiscal or market muscle, a wise inventor will likely explore the concept of joint venturing. This route has many benefits, since it allows for the inclusion of entities capable of prototyping and perhaps

testing the invention or product (where independent testing is not an issue). As it will make the patent holder look bigger and more 'corporate', it ought to provide financing sources to cover work on patent claims, product development and out-of-pocket expenses.

With joint ventures, the issues will be driven by how the developing interests of the parties will be managed until each can effect an exit. This normally becomes more of an issue with the inclusion of pure financial investors, who typically require higher returns than their strategic counterparts, whose interests may also lie in manufacturing and/or distribution and who will be looking for a structured exit option – almost certainly requiring some form of valuation with all its attendant drawbacks.

While patent-holding individuals may have issues when approaching the market, in the corporate world things are getting more complex as IP rights become more important. The share of companies' balance sheets accounted for by intangibles has been on the rise for the past 30 years. As a result, intangibles now make up a much higher proportion of corporate balance sheets than ever before – thereby increasing their importance to today's organisations. A significant proportion of these intangibles tends to be IP rights such as patents, licences and trademarks. Increasingly, we are seeing companies' IP departments spawn more divisions to enhance their ability to handle in/out-licensing as well as IP mergers and acquisitions. Companies are beginning to realise that they may have valuable assets locked away in the bottom drawer.

Amid all this increased activity, IP auction houses have sprung up, as have venture funds specialising in intellectual property. As a result, corporate enterprises have more options to commercialise their intellectual property, although many do not feel that they are 'sweating' these assets hard enough. According to the World Intellectual Property Organisation, companies mainly use patents internally, but one-third of all companies are not using their patents at all. It seems strange that assets representing a large minority of companies' balance sheets are not being examined with the same rigour that is applied to other assets, such as property holdings.

The main problem for corporate enterprises in relation to IP rights seems to be actually understanding what it is they own, how they own it and whether it is adequately protected – and then determining how best to bring it to market. While companies are experts in their own field, when it comes to out-licensing into another industry they face the same kinds of problem that individual inventors face upon entering a new and potentially hostile market:

- Companies spend significant time and resources researching and negotiating various alliances, yet many fail to monitor effectively the royalty and other revenue streams negotiated with their partners. All too often, a great deal of revenue is left on the table. Given the complexities related to tracking and extracting the optimum value from intellectual property – especially for large and diverse organisations – it makes sense that they undertake a programme of regular audits of their IP rights.
- Ongoing communication and collaboration are also important, since this dearth of monitoring activity often stems from poor coordination between legal, accounting/finance and sales departments, as well as from the turnover of personnel responsible for oversight.
- Language and cultural barriers also exist, exacerbating the complexities and resulting in contract misinterpretations. PricewaterhouseCoopers has found that approximately 90 per cent of its royalty examinations identify underreported or misreported financial results by partners, and that these discrepancies are primarily due to contract interpretation differences, accounting oversight and clerical errors.

So for both individual inventors and companies, the first question seems to be: what do I actually have? A patent or other form of IP protection is obviously an issue for inventors large and small, although individual inventors will be patenting for the first time, while companies may seek to understand whether they should actually be paying those renewal fees on their patent portfolio.

These initial questions will swiftly be followed by the obvious: how much is it worth? But the definitive answer to the valuation question can be found only in the market. The answers may well be found by those with a savvy approach to the market – an approach based on the following guidelines:

- Pay close attention to timing. Come to the market too early and you risk being ignored as irrelevant; come to the market too late and the major players will have consolidated their positions. In addition, there may be issues related to prior art.
- Carefully plan your approach to deal type and size. A stealthy 'building blocks' approach rather than a major splash may reap richer rewards. The range of potential structures from licensing to outright sale, with all the hybrid options in between, allows for a

multitude of approaches. But remember: the more options, the more structuring work required.

- Choose your partners with care. Trust and integrity are important considerations. It may take some time to derive the desired revenue streams and your interests may diverge along the way.
- Balance commercialisation and protection. A good set of advisers – including patent agents, legal counsel and corporate finance/industry experts – is highly beneficial to the process. Good communication and collaboration are key.

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