

Making intellectual property pay

Many companies are not fully aware of the value and importance of the intellectual property that they own. With the successful exploitation of research and development becoming increasingly important, Ian Harvey highlights the issue and describes the strategies that companies can adopt to make the most of their intellectual property assets.

At the beginning of February this year, James Dyson announced that he was proposing to move the manufacturing operation for his Dual Cyclone vacuum cleaner from Wiltshire to the Far East. It was a tough decision to make, said Dyson, but in the end it was just too expensive to do the work in the UK; costs in East Asia are significantly lower.

Dyson's move highlighted a growing reality facing the engineering sector, as well as other manufacturers, in the UK. In today's global economy, companies

operating in countries in western Europe and North America are fighting an almost impossible battle to compete on price with low cost, high quality manufacturers based in the developing nations. Instead, they are having to find other ways to take their businesses forward. And here again Dyson points the way. In building a business around innovation and being first to market, Dyson has been able to carve out a lucrative niche – one that competitors have found very difficult to encroach upon.

Key to Dyson's success has been his identification of intellectual property, and especially patents, as a means of safeguarding his interests. Patents are government-granted rights which allow an individual or a company to prevent someone from using technology they have developed without their permission. And in ensuring that he filed for patent protection whilst developing the Dual Cyclone, Dyson was able to fight off Hoover's attempt to muscle in on the bagless vacuum cleaner market when it launched the Vortex in 1999.

When the Vortex appeared, Dyson's company faced the threat of seeing its prices undercut and its market shrink. For Dyson himself, 15 years of work were in peril. But because he believed he could show that the Vortex technology infringed his patents, Dyson took Hoover to court. As everyone now knows, he eventually emerged from the proceedings with a damages award and an injunction preventing Hoover from offering the Vortex for sale until a year after the Dyson Dual Cyclone patents had expired. In filing patents and being prepared to enforce them, Dyson had ensured a powerful competitor was excluded from the market: without patent protection, Dyson would have been powerless.

James Dyson now has a market worth hundreds of millions of pounds a year all to himself. His inventiveness, his entrepreneurial skills and his understanding of the patent system have given him this. What has remained unreported about Dyson's decision to switch production to the Far East, however, is that his initial vacuum cleaner patents are due to expire in the next couple of years. When this happens he will lose his ability to shut competitors out and will instead be more reliant on his follow up patents and price in order to maintain market share. Knowledge of how patents work is again allowing Dyson to make important decisions about the future of his company.

But as a company boss with a full grasp of the importance of intellectual property, Dyson remains the exception amongst those running engineering businesses in the United Kingdom. The unfortunate fact is that most directors are still struggling to come to terms with the value which resides in the intellectual property their companies own. In too many boardrooms, patents are misunderstood and not regarded as the valuable assets they really are. By failing to understand this, companies are not thinking strategically about intellectual property rights. In a world where the ability to create, protect,

manage and exploit them is emerging as a key issue, this is potentially a big mistake.

Intellectual property success stories

The lack of strategic focus on intellectual property issues in the boardrooms of British engineering companies is particularly puzzling when you look at the success enjoyed by a whole range of companies that have understood what intellectual property rights can do for them.

Take IBM, for example. The company learned about intellectual property the hard way when it developed high temperature superconductors in the late 1980s. Although it applied for patents, it only did so ten months after its research findings had been published. Not only did this mean IBM lost all hope of patent protection beyond the US, but it gave competitors plenty of time to replicate the work and to file patents covering their own developments. During the 1990s, however, IBM started to make amends. The company decided to rework the way it dealt with its intellectual property portfolio: instead of seeing it merely as a defensive barrier to prevent rivals encroaching on its territory, IBM began to license out its technology to those willing to pay the asking price. It is a strategy that has yielded dramatic results. From revenues of \$30 million in 1990, IBM generated an estimated return from licensing of \$1.5 billion in 2002, or 15% of its entire profits. The patent department is therefore a significant profit centre at the company these days.

But IBM is a company which has used its intellectual property portfolio to add to profits already being generated. For Texas Instruments, a reassessment of the way in which it used its patents actually brought the company back from the brink of extinction. In 1985, when Jerry Junkins was appointed CEO, the future for Texas Instruments looked bleak. The company was losing market share



rapidly and profits were diving. Junkins knew he had to totally rework the way in which his business operated. It was a challenge he did not shirk. He decided to focus on the portfolio of patents that TI had accumulated. What he quickly realised was that many of the products being put out by other companies were underpinned by TI's intellectual property. And no-one had asked permission to use it.

As a result, Junkins got busy. He hired a team of lawyers and went to court to assert TI intellectual property rights relating to the basic design of integrated circuits. Following this, Junkins contacted a number of companies in order to demand royalty payments for the use of TI patents. Having seen TI win cases in court, not many turned down the offer to negotiate a deal. The strategy

generated tens of millions of dollars a year. An agreement with several Japanese companies negotiated in 1986, for example, had netted \$1.5bn in licensing revenues by 1993.

Junkins died in 1996 but his strategy lived on. In 1997, new CEO Tom Engibous approved the purchase of a company called Amati. The price TI paid was \$450 million, a figure which raised many eyebrows as Amati had actually run up a loss of \$30 million on sales of \$13 million over the previous year. But Engibous knew what he was doing. Amati owned a portfolio of key patents relating to digital subscriber lines (DSL). Engibous's foresight means that companies producing DSL modems now have to pay a licence fee to TI. One very clever purchase has given the company a substantial stake in a sector currently estimated to be worth \$4 billion a year.

Key to everything TI does is the strategic way it thinks about patents. In broad terms, that means securing patent protection for all technologies it believes are crucial to its development and analysing the products of competitors to ascertain whether the technologies inside infringe TI intellectual property rights. If they do, TI does not sit back. Instead, the company makes sure it goes after the culprits either to stop them, negotiate a licensing deal or to put together some other form of co-operative venture. If all else fails, the company is quite prepared to go to court. Texas Instruments has acquired a reputation for asserting its rights and has prospered as a result.

But awareness of intellectual property rights is not only about making more money, it can also help prevent expensive mistakes. We have already seen how IBM lost out in the field of high temperature superconductors by failing to adopt a sensible patent filing strategy, but what about the UK engineering company that spent more than £600,000 on developing a new process for making products from metal wire? Having come up with a product, they decided they should

apply for patent protection and consulted a local patent lawyer who conducted a search of existing patents in the area. Unfortunately for the company, he found that the idea had already been thought of in the US twenty years before but was never patented in the UK. As a result, the engineering company could not obtain any form of protection. Instead of spending £600,000 they could have obtained this information for the cost of a search, approximately £20.

Investors catching on

James Dyson has frequently criticised the costs associated with getting patent protection and these can be substantial for global coverage. For example, it will cost over £150,000 to protect one moderately complex technology over the course of its lifetime through patents filed in eight countries. That is without taking into account the money that will have to be spent if there is any litigation involved. When you look at figures such

as this, it is hard to escape the conclusion that Dyson does have a point. But although he has complained, he has never stinted in paying out what is necessary to obtain the protection his company's technology needs. He realises that patents are of pivotal importance to the business he runs and that therefore the cost of getting and defending them is an unavoidable part of the management process. If only the majority of British engineering companies thought the same way.

That they should is borne out by two recent studies published at the end of last year. Work done by the US law firm Howrey Simon Arnold & White shows a growing trend in the City of London to take intellectual property management strategies into account when assessing the value of companies. In a survey of fund managers, analysts, private equity investors and venture capitalists published in December 2001, Howreys reported that 93% of respondents believed intellectual property rights to

Patent facts

- To service one patent covering moderately complex technology over the course of its lifetime in eight countries is estimated to cost over £150,000.
- The world's three most important patent offices are the European Patent Office (EPO) in Munich, the United States Patent & Trademark Office in Arlington, Virginia (USPTO), and the Japanese Patent Office in Tokyo (JPO).
- Patent protection is usually granted for 20 years from the date the patent was applied for.
- Most countries operate a first to file system for protection. That is, the first person to apply for protection gets it. However, the US operates a first to invent system.
- It can take up to three years to obtain a patent and the cost of doing so varies enormously. To obtain patent protection in the European Union through the EPO, for example, can cost up to £28,000, four times more than you can expect to pay to obtain protection in the United States.
- It has been estimated that only 1% of British companies have intellectual property insurance coverage. Intellectual property insurance covers the cost of litigating intellectual property rights, including patents.
- The average cost of taking a patent case through to decision at the High Court is around £250,000 in the UK, significantly more than in any other European country.
- Around 50% of all patent litigation in Europe takes place in Germany.
- It is not unusual to spend more than \$1 million in bringing or defending a patent case in the US.

be crucial to the enhancement of profit, whilst 78% stated that an effective intellectual property strategy was fundamental to improving a company's share price.

On the back of this came a report compiled by London corporate venturing company Edengene which looked at the attitude of FTSE quoted companies to intellectual property rights. The research showed that the capital markets are beginning to pick up on corporate intellectual property strategies and are reassessing the valuations they put on companies as a result. It was also found that investors were increasingly sceptical of the value of intangible assets in cases where companies could not demonstrate their intellectual property credentials. Edengene took companies that reported having the strongest processes for managing and commercialising intellectual property. They then took the net asset value and market capitalisations of each of these at two fixed points – March 2000 and October 2001. Once this was done the exercise was repeated for the FTSE 100 as a whole. The results made interesting reading: as a ratio of market capitalisation divided by net asset value, the intangible premium for the

intellectual property commercialisers had increased from 4.4 to 5.6 in the eighteen-month period between March 2000 and October 2001. In contrast, the intangible premium for other FTSE 100 companies had fallen from 3.1 to 2.1.

When the two surveys are read together, it is difficult to avoid the conclusion that Howreys come to in their executive summary: 'Simply protecting patents will no longer satisfy the investment community. Increasingly, companies need to develop a comprehensive and ongoing intellectual property strategy as well as effective valuation tools in order to build investor confidence.'

For companies working in the engineering sector the message is clear. It is time to take a serious look at intellectual property. Investing money in research and development is pointless if you are not able to protect the products that emerge from this process. Furthermore, by failing to think creatively about patents, companies are missing out on significant opportunities to enhance value. As investors place an increasing emphasis on the way companies use intellectual property, ignoring the issue is no longer an option. ■

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