

### THE VALUE OF A PATENT TO AN INVENTION

In theory, a patent allows an owner to control competition and market share while also influencing pricing. By having a monopoly to a key feature of a product, the owner should be able to add a premium to the base cost of that product, subject of course to traditional market forces. This is analogous to consumers being prepared to pay for additional optional features in a new car or for business class travel with an airline – the desired feature comes at a premium.

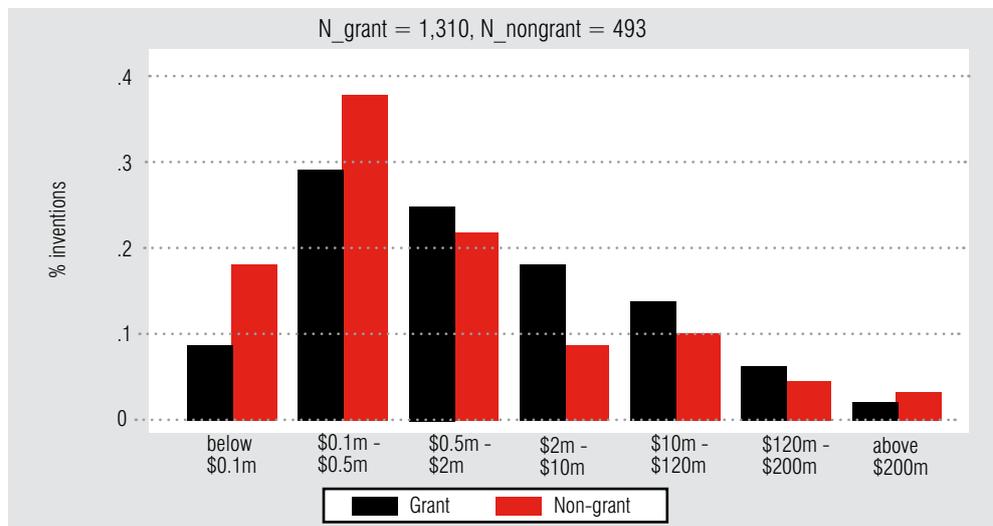
The question often asked when considering patent protection is what empirical or quantitative value will the patent add to the value of the invention? In other words, is there real value in seeking patent protection, and will a patent give any financial advantage in the marketplace?

In what is good news for patent owners, a recent study suggests that a patent does indeed add value to a product. The results of that study are presented in a paper published by the Melbourne Institute of Applied Economic and Social Research and the Intellectual Property Research Institute of Australia (IPRIA) entitled, 'Estimating the Patent Premium: Evidence from the Australian Inventor Survey'. The paper concluded that 'the presence of a patent increases the returns to an invention by around 50 percent'. This finding was based on data from the Australian Inventor Survey 2007, which surveyed inventors of Australian patent applications between 1986 and 2005.

In the survey, each inventor was asked in part to estimate the monetary value generated by their invention. A key feature of the survey was that it was directed to inventors of all patent applications that reached a conclusion and not only those that proceeded to patent grant. Thus, information was derived on the value of all inventions whether they were patented or not. Applications that were still pending at the time of the survey were excluded from the results as it could not be known for certain whether the applications would result in a granted patent or not.

It is clear from the study that the absence of a patent did not result in an invention being worthless, rather, quite the contrary. In many cases highly valuable inventions did not have patent protection. However, the study found that there 'are proportionately more valuable inventions (above \$2 million) among those inventions which are protected by a patent', and that 'patented inventions are more valuable'.

These findings were supported by Figure 3 of the paper:



**Figure 3: Distribution of private invention value, by patent grant status.**

Reproduced from Estimating the Patent Premium: Evidence from the Australian Inventor Survey, Paul H. Jensen Russell Thomson Jongsay Yong Melbourne Institute of Applied Economic and Social Research, and Intellectual Property Research Institute of Australia (IPRIA) The University of Melbourne Intellectual Property Research Institute of Australia, Working Paper No. 11/09 ISSN 1447-2317

This figure shows that non-patented inventions have a much steeper bell curve than patented inventions. For granted patents, the mean value was \$6.7 million, and the median \$975,000, whereas for non-granted patents (ie, lapsed or withdrawn patent applications), the mean value was \$6.1 million and the median only \$365,000.

Interestingly, the paper found no evidence that technology areas are differentially affected by the presence or absence of a granted patent. This is perhaps counterintuitive to assumptions that patents are more valuable in areas of biotechnology and pharmaceuticals.

The paper found, on average, that having a granted patent increases the returns on an invention by 50 percent. While such an increase is substantial for some high value inventions, this is of course not the case with all patented inventions, with some having little, if any, premium added to the value of the invention. Thus, while it is pleasing that a patent on average adds value for the owner, there is still no substitute for ensuring that all patenting decisions are made in the context of strategic management of the patent portfolio, taking into consideration a company-wide business plan.

What is clear is that professional, commercially focused advice tailored to an overall business strategy should be sought at an early stage in order to decide whether patenting is worthwhile to the business, and if so, to develop a patenting strategy to best protect the new product or process.

A copy of the paper may be obtained from <<http://www.ipria.org/publications/wp/2009/IPRIAWP11.2009.pdf>>.

**Paul Fong**



While trade marks and brands both serve the function of quality indicators, there is a fundamental difference between the two. Put quite simply, a trade mark is what the business says it is – a brand is what the consumer sees it as.

Successful businesses effectively market a brand by integrating and implementing the perspectives of both trade mark practitioners and marketers.

### **Difference between trade marks and brands**

Trade marks are signs that denote commercial origin by distinguishing goods or services provided in the course of trade from goods or services provided by others. A registered trade mark is a proprietary right which gives the trade mark owner the exclusive right to use the mark in respect of the goods and services for which it is registered, and prevent competitors from using the same or a confusingly similar mark.

A brand, on the other hand, is the image or impression that consumers associate with a particular product, service or company. The brand personifies otherwise similar products and services and gives them a personality, a character and a reputation. As put by one of Britain's leading economists, brands encourage people to make statements about themselves to others:

*I am irresistible, I say, as I put on my designer fragrance. I am a merchant banker, I say, as I climb out of my BMW. I am a juvenile lout, I say, as I pour an extra strong lager. I am handsome, I say, as I put on my Levi jeans.* (John Kay)

Although a trade mark is only one aspect of a brand, a trade mark acts as a peg in the minds of consumers to which visual images, emotional connections and positive associations can be attached. These pegs need not be traditional words, logos and symbols, but can include aspects of packaging, shapes, colours, sounds and scents.

For example, think about computer products such as laptops, software and processors. As products, they are relatively abstract and possess no particular personality or image. Now think about the trade marks that distinguish these products from one another, such as APPLE, MICROSOFT and INTEL. Finally, think about what these brands stand for.

While the word APPLE is still the same trade mark as it was in the 1980s, the APPLE **brand** has certainly evolved and grown since then to become what it is today. Whatever image you possess of Microsoft, that image is probably attached to the red, green, blue and yellow colours of Microsoft's 'windows' logo. By utilising a trade mark registration for a five tone audio melody progression, consumers are able to identify with the INTEL brand even though Intel's product is essentially one or more internal components of a computer. These companies are no longer marketing products, they are marketing brands.

### **The role of trade mark practitioners and marketers in building a brand**

Although trade mark practitioners and marketers approach the issue from different perspectives, it is the synergy of the relationship between the two that can provide the basis for building strong brands. Businesses engage trade mark practitioners to anticipate and identify issues, and to apply their legal knowledge to resolve trade mark related problems. As such, trade mark practitioners generally encourage businesses to adopt unique, distinctive and memorable marks rather than descriptive or laudatory marks because they are more likely to be available for use without conflict with a prior user, and be registrable and thus enforceable.

However, good trade mark practitioners also appreciate that marketers want to convey messages about their products and services to consumers as quickly and effectively as possible. From a marketing perspective, it is easier to familiarise consumers with a product through innovative uses of descriptive marks than with invented marks. This is particularly the case where the product is expected to have a short shelf-life – where increased first-to-market sales may be more important than exclusive rights.

Trade mark practitioners should familiarise themselves with the objectives of the business, thereby understanding the commercial reasons behind a marketer insisting on a descriptive or laudatory mark. In that situation, the trade mark practitioner can suggest other ways of sufficiently distinguishing the goods or services. This can include the use of secondary trade marks, labels, aspects of packaging, shapes, colours, sounds and scents. The successful aspects of a brand can be leveraged to promote new products and services under different marks with minimal risk to the primary brand, as was seen by Kraft Foods, Inc's recent VEGEMITE iSnack 2.0 promotion. There is no limit to what a business can achieve through the right combination of trade marks and brand marketing.

### **Summary**

Despite the fact that trade mark practitioners and marketers bring together a different set of skills to a business, it is the effective combination of the two that can ultimately assist in developing brand equity, and a business marketing a brand is a business primed for success.

**Sean McGuire**

## DEFINING 'IMPROVEMENTS' IN TECHNOLOGY CONTRACTS

A technology licence will typically address the important issue of the respective rights and obligations of the licensor and licensee in relation to 'improvements' to the licensed technology developed by either the licensor or licensee, separately or jointly.

However it is important that the meaning of 'improvements' be defined in the context of the particular licence, as it is not a term of art.

A definition commonly used in patent licences limits 'improvements' to developments or modifications of the relevant technology that are within the scope of the claims of the licensed patent(s). Any developments or modifications that fall outside the scope of the claims of the licensed patents are outside that definition.

A recent decision of the Court of Appeal of the Supreme Court of NSW (*Fermiscan v James*)<sup>1</sup> illustrates the difficulties that can arise in deciding whether a particular development is an 'improvement'. The case involved the assignment of technology, not licensing of technology, but the principles and issues raised are equally relevant to licensing.

Dr James is a physicist and mathematician who developed a process using x-ray diffraction of human hair samples to screen for breast cancer. She obtained a patent over the process, and assigned the patent (entitled 'Using hair to screen for breast cancer') together with all 'Improvements' (as defined in the assignment agreement) to Fermiscan. Dr James continued to work in the field of x-ray diffraction, and subsequently filed a patent application covering a diagnostic process using x-ray diffraction of human nail and skin. Fermiscan claimed that this second process was an 'Improvement' as defined, and that the relevant patent should therefore have been assigned to Fermiscan.

The relevant agreement contained a lengthy definition of 'Improvement' as follows:

*'Improvement' means any invention, discovery, modification, adaptation or improvement, whether patentable or not, which can be used to reduce manufacturing or assembly costs of the products of the exercise of the Invention or improve the performance of any product or process, increase the service or shelf life of any product, broaden the applicability of any process employed in or toward the Invention or range of uses of any product thereof or create a wholly new product or component or process which replaces or is an enhancement of the subject matter of the Invention, devised by or for the Assignor and/or the Inventor, or vested in the Assignor and/or the Inventor, and whether or not the use of which by any person other than the Assignor and/or the Inventor or the Assignee would infringe any Registered Right, and shall mean and include all and any Registered Rights in respect thereof.*

The key issue in the case was whether the second process was an 'Improvement' of the first process. The term 'Invention' was defined in the relevant agreement as being the invention 'the subject of' the patent for the first process.

### Decision of the primary judge

The judge at first instance (McDougall J) decided that the claims of the patent covering the first process were limited to the testing of human hair, and did not extend to human biological material more generally. On the other hand, the claims of the patent covering the second process were limited to the testing of human skin and nail.

Fermiscan argued that the second process broadened the applicability of the first process, or created a wholly new process which replaced or enhanced the first process, within the definition of 'Improvement'. Fermiscan pointed to the fact that both processes involved the diagnosis of a pathological condition by comparing the x-ray diffraction pattern of biological material against known data, and argued that the second process involved a 'broadening' of the first process from hair to skin and nail.

Dr James argued that the two processes were different, in that one involved the testing of human hair and the other involved testing of human skin and nail. Dr James also argued that to treat the second process as an improvement of the first process would effectively mean that, by assigning all rights to improvements, she had contracted out her right to pursue her life's work, and that this was never the intention of the parties.

McDougall J concluded that the second process was not an 'Improvement' of the first process as defined. The second process did not 'replace' or 'enhance' the first process – it was essentially a different process. As such, Dr James was entitled to retain ownership of the patent covering the second process.

### Appeal decision

Fermiscan appealed the decision of McDougall J, but was unsuccessful. The Court of Appeal agreed with McDougall J's conclusion, although for somewhat different reasons.

Fermiscan's arguments on appeal were concentrated on the proposition that the second process was 'an invention ... which can be used to ... create a wholly new ... process which replaces ... the subject matter of the Invention'.

Fermiscan argued that the second process 'replaces' the first process by giving an alternative process for the detection of pathological conditions. However Allsop P, with whom Ipp JA agreed, decided that the word 'replaces' means 'to take the place of the claims' of the first invention, and stated that a new process with one or more further integers in addition to the claims of the first invention would replace the first process. Handley JA adopted a similar view, concluding that a new process which omitted one of the essential integers of a claim in the patent for the first process, or a process which added a new essential integer, to give the same or a better result, would constitute an improvement as defined. The second process did not involve the addition or removal of an integer to the first process as claimed, and it was therefore not an improvement as defined.

### Lessons from the case

Presumably the outcome of the case would have been different if the definition of 'Improvement' had specifically encompassed diagnostic processes involving the use of x-ray diffraction and human biological materials generally.

## This case highlights the risks associated with using pro-forma or generic definitions of terms such as 'improvements' in technology contracts.

The key lesson from the case for parties entering into a technology contract is to think carefully about how the relevant technology might be further developed, and to define and allocate rights to improvements accordingly. Watermark's lawyers have experience in the negotiation and drafting of technology contracts, and regularly advise clients in relation to these issues in technology licences, research contracts and other agreements.

### Peter Hallett

<sup>1</sup> *Fermiscan v James* [2009] NSWSCA 355 (11 November 2009)

# PROPOSED CHANGES TO THE PATENT ENFORCEMENT REGIME IN AUSTRALIA

Effective enforcement of patents in Australia has been a point of debate for some time, particularly for small and medium-sized enterprises (SMEs)<sup>1</sup>. As a response to concerns, the Advisory Council on Intellectual Property (ACIP) was requested in 2006 by the Minister for Industry, Tourism and Resources to conduct a review of issues relating to post-grant patent enforcement strategies.

Responses to the resulting Issues Paper of November 2006 have now been considered by ACIP and have been used to prepare an Interim Report<sup>2</sup>. Following further consultation, ACIP expects to submit its recommendations in a final report to the Government of Australia in late 2009.

## Proposals in the Interim Report

Briefly, the key proposals put forward by ACIP to date are that:

- an IP dispute resolution centre, incorporating a validity and infringement opinion service, be established by IP Australia;
- a register of experts be established to provide non-binding expert assessment and mediation capability;
- a Patent Tribunal having members drawn from the register of experts be established within the IP dispute resolution centre;
- IP Australia provide an information resource regarding patent enforcement;
- the Federal Magistrates Court be expressly given jurisdiction over patent matters; and
- Australian Customs officials be given powers to seize infringing goods.

## What are the issues for patentees?

ACIP and its predecessor, IPAC, have previously submitted numerous reports to the Government raising patent enforcement issues. Recurring issues include the cost, complexity and delay of litigation, and the lack of knowledge amongst many patentees as to the enforcement mechanisms available.

When a patent owner is confronted with an apparent infringement, the first step in asserting patent rights is generally to send a letter of demand to the alleged infringer. There is some empirical evidence that this can be an effective strategy in stopping the infringing conduct or in initiating negotiations leading towards a licence agreement<sup>3</sup>. However, should the letter of demand be ignored or a counter-assertion of non-infringement and/or invalidity be made, the only way to progress the matter under the present regime may be to initiate infringement proceedings before the Courts. This inevitably results in a cross-claim for revocation of the patent for invalidity, and some patentees are, as a result, reluctant to sue for infringement<sup>4</sup>.

The average time for patent cases to reach judgment in Australia was recently estimated as 2.7 years from filing to the first instance decision<sup>5</sup>. This high average figure is in part due to delaying tactics on the part of the parties to the litigation<sup>6</sup>. It is also possible that consideration of validity issues is a major contributor to the extended time frame<sup>7</sup>, particularly when one considers the labyrinthine inventive step provisions in the *Patents Act 1990* and the resultant need to adduce extensive expert evidence. When the technical subject matter of the invention is particularly complex then that, too, can add considerably to the length of the litigation. It goes without saying that the greater the time taken to resolve the litigation, the greater is the expense to both parties.

## How will ACIP's proposals address these issues, and how feasible are they?

The establishment of a centralised IP dispute resolution centre by IP Australia would provide a single point of initial contact for those patentees who might otherwise have little idea of the options available to them, and the cost and timing of those options<sup>8</sup>.

ACIP argues that a validity and infringement opinion service, along the lines adopted by the UK Patent Office, could provide a quick and relatively cheap administrative procedure for resolving a patent dispute without the need for Court proceedings. Some of the submissions to the Issues Paper expressed reservations about the capacity of IP Australia to provide the necessary expertise, and of the utility of such a service given that correction of errors would need to be achieved by appeal or administrative review, adding complexity, delay and expense to the process<sup>9</sup>.

The Interim Report strongly supports the facilitation by IP Australia of access to mediation services, and to expert assessment services, as means for narrowing and clarifying the issues under dispute<sup>10</sup>. Whilst not suitable in all circumstances, such alternative dispute resolution (ADR) mechanisms could be quite beneficial.

A further option proposed by the Interim Report is the establishment of a Patent Tribunal, as a non-binding determinative ADR process. However, several submissions to the Issues Paper expressed doubts that the addition of this further layer of procedural complexity would have any benefit over modifications to the existing Court system<sup>11</sup>.

The benefits to patentees of allowing Customs officials to seize shipments of infringing products are clear. It is doubtful, though, that such a scheme would be workable unless it was based on notification to Customs by the patentee, as is presently effective for trade marks and copyright owners<sup>12</sup>.

Any major changes to the Court system or additions to services presently provided by IP Australia, such as a validity and infringement opinion service or a patent tribunal, are likely to be problematic due to the significant resources that would need to be brought to bear and could compound delay if an appeal process is invoked.

In the author's view, the needs of SMEs could be at least partly addressed with minimal disruption to existing arrangements. For example, a centralised IP dispute resolution centre could be of great benefit to SMEs, but the role played by such a centre should remain restricted to education as to the options available, and the cost and availability of external services such as mediation and expert assessment.

Any patent system is incomplete in the absence of cost- and time-effective enforcement mechanisms. Whilst the current Australian Court system is relatively easily accessed by large, often multinational patentees, if Australians are to derive value from home grown innovation, the enforcement system needs to adapt to reflect that most Australian innovators are SMEs who need to be able to ensure that their investment in intellectual property rights does not go to waste for want of appropriate forums of dispute resolution.

## Ken Simpson

1 ACIP, 'Review of enforcement of industrial property rights', March 1999, at 5

2 ACIP, 'Post-grant enforcement strategies: Interim Report', August 2009, available online at <[http://www.acip.gov.au/library/ACIP\\_postgrant\\_enforcement\\_strategies.pdf](http://www.acip.gov.au/library/ACIP_postgrant_enforcement_strategies.pdf)>

3 K Weatherall and E Webster, 'Patent infringement in Australia: Results from a survey', IPRIA Working Paper No 10/09 (2009), at 7

4 ACIP n1, at 8

5 F Rotstein and K Weatherall, 'Filing and settlement of patent disputes in the Federal Court 1995-2005', IP Forum 68, pp 65-74 (2005)

6 Ibid

7 K Weatherall and P Jensen, 'An Empirical Investigation into Patent Enforcement in Australian Courts', IPRIA Working Paper No 07/05 (2005), at 36

8 ACIP n2, at 13

9 Ibid, at 33

10 Ibid, at 36

11 Ibid, at 39

12 ACIP n2, at 54