

Patents, Innovation in Australia

Report on Australia's patent system recommends more active role for competition, local innovation

BY JOHN STONIER*

(EDITOR'S NOTE: In November 1984 a Report by the Industrial Property Advisory Committee reviewing the Australian patent system was released. John Stonier was chairman of the committee. The Australian Government has called for public comment on the report before considering legislation to amend the Patents Act.)

There has been some comment in the press on the recent report reviewing the Australian patent system by the Industrial Property Advisory Committee. One view came from Jane Ford in the November 1984 issue of "Scitech," where she stated that our detailed study "has concluded that the system should be retained but with a number of substantial changes and improvements." That contrasts with an article in the "Financial Review" of 19 November by journalist Mark Lawson: "But seldom has a Committee had so few changes to recommend as had the Industrial Property Advisory Committee which recently handed its Report on the patents system to the Federal Minister for Science and Technology, Mr. Barry Jones. As the dissenting statement by University of Queensland economist Professor D.M. Lamberton says, the report's recommendations are mostly for the system to stay the way it is."

THE NATIONAL INTEREST

Let me start by making the general comment that the main perspective or criterion for reform in this report is Australia's "national interest." There are problems, of course, in deciding just what is meant by the Australian national interest. For example, the Australian community is made up of different groups with different interests. We have producers or manufacturers, consumer, and inventors. In many cases their interests coincide, but not inevitably or always. The committee had to somehow reconcile these different and often conflicting interests, taking a broad view of the Australian national interest. We concluded that our objective should be to optimize the net benefits of the patent system, and that this involved seeking three things.

First, the report seeks to foster indigenous innovation, and utilize the international patent system in developing

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export markets to improve Australia's international competitive position. That aims to achieve increased benefits. Second, it seeks to reduce unnecessary social costs. In doing that, of course, there is a very fine line to be drawn, for by reducing costs and by reducing levels of patent protection one may thereby discourage investment and innovation. Third, it seeks to improve the administration of the system, which also involves a reduction in costs.

In attempting those things, regard must be had to the Paris Convention for the Protection of Industrial Property, to which Australia is a signatory. The convention requires, among other things, that there be at least a degree of reciprocity by way of equal treatment of nationals and nonnationals.

Regard must also be had to the particular economic situation in which Australia finds itself. We have a high-income economy, a small market, and little export of manufactured goods. We have a concentrated industry, and one in which there is a high degree of foreign investment and control. Another factor that I should particularly mention here is that Australia is experiencing declining investment by industry in research and an increasing proportion of government-funded research. Finally, it should be borne in mind that there are other and more direct ways of encouraging investment in innovation, such as direct grants, and tax and other concessions.

THE RECOMMENDATIONS

Taking all those factors and parameters into account, the committee's aim was to identify the national interest and see how it could be furthered by changes to the patent system. The report contains a total of 46 recommendations, and a couple of sub-recommendations within them. I have attempted in Table 1 to classify the recommendations, from what may admittedly be described as a rather subjective point of view, into four categories.

The first category contains recommendations for what I regard as changes in principles or approach. I have subclassified them into major and minor.

The second grouping contains recommendations for changes in administration, subclassified also as major and minor.

The third category is of recommendations for retaining present features of the patent system, with a subclassification into retention subject to no change and retention subject to certain specified change.

The fourth and last category is of recommendations for further study or action.

The totals for each category are 20, 11, 4 and 3, respectively. On another breakdown, there are 20 major changes in principle or administration, and 10 recommendations for retaining a feature with no change. On this basis you

CLASSIFICATION OF RECOMMENDATIONS

CHANGES IN PRINCIPLE OR APPROACH		CHANGES IN ADMINISTRATION		RETAIN, SUBJECT TO		FURTHER STUDY OR ACTION
Major	Minor	Major	Minor	No Change	Specified Change	
2	3	8	25	12	1	20
7	4	16	32	15	(subject to all other recs)	34
9	6	21	37	(but see 13)	5	41
11(ii)	14	23	38	17	(subject to 6-9)	
13	28	35	39	19	(subject to 6-9)	
18			40	(but see 18)	10	
22(i)				24	(subject to 2-9)	
22(ii)				30	11(i)	
26				36	(subject to 11 (ii))	
27				(probably)		
29				42		
31				43		
33				44		
45						
46						
15	5	5	6	10	4	3

Table 1

will see that I agree with the interpretation of Jane Ford. (I should point out that I have classified and counted the two parts of Recommendations 11 and 22 as separate recommendations for the purpose of this analysis.)

My intention here is to direct discussion to the first column of major changes in principle or approach and touch on what they cover.

COMPETITION LAW

The first recommendation that I have classified as major is No. 2, which deals with patents and competition law. Now, a patent gives a degree of monopoly power in that the patentee has the right to exclude others from making, using or selling the patented invention. As such, patents are regarded by some people as being in total conflict with the objectives of competition law, which has the purpose of encouraging competition, and proscribes conduct which has the effect or likely effect of substantially lessening competition.

These principles are embodied in the Trade Practices Act. But patent law also has the objectives of fostering competition by encouraging invention and innovation, facilitating new entry, and publishing information, and the committee concluded that the two laws are compatible. They both have the central economic goal, as Bowman put it, "of maximizing wealth by producing what consumers want at the lowest cost." The recognition of this goal involves an acceptance that neither the Patents Act nor the Trade Practices Act ought to have an absolute priority over the other, but that each should contribute positively to that central economic goal.

This perspective, in the committee's view, reflects the original situation under the 1623 Statute of Monopolies, which provided the basis for our modern-day patent laws. While the statute allowed for monopolies for new inven-

tions, there was an exception if the monopoly was "contrary to the law or mischievous to the State, by raising prices of commodities at home or hurt of trade or generally inconvenient." In a sense, Recommendation 2 would reinforce that original provision by removing the present exemptions that largely protect patent-related conduct from the operation of the Trade Practices Act.

The effect of removing those exemptions would be that such conduct would have to be examined to see if it had the effect or likely effect of substantially lessening competition. We saw no reason why patents should be exempted from the lessening of competition test. We also recommended that this examination of patent-related conduct not be subject to the present per se rules in the Trade Practices Act. In our view the recommendation would assist to reduce the social costs associated with patents.

COMPULSORY LICENSES

One of the remedies that already exists, in a case where a person is unable to obtain a voluntary license but still wishes to manufacture a patented product or use a patented process, is the right to seek a compulsory license. The Committee read the sections in the Patents Act with great care and they appear to apply in a wide range of circumstances.

However, we were also conscious that, to the best of our knowledge, there have been only two cases of an application to the courts for a compulsory license, and both were unsuccessful. Now, one could conclude from this that the sections are inadequate.

On the other hand, the converse could be argued equally strongly; that the mere existence of the compulsory license remedy means that patentees are aware of its implications and therefore modify their conduct accordingly, granting voluntary licenses on reasonable terms. In

fact, there is no satisfactory evidence supporting either view of the effectiveness of compulsory licenses, or even somewhere in between. There is, however, the persistent feeling that more compulsory licenses may be sought if the provisions were made more effective in practice.

Another possible reason why compulsory licenses are not sought could be that the potential Australian manufacturing licensee needs more than the information contained in the patent specification. Also needed may be know-how, that unpatented information, which is often so important to commencing or increasing production, improving quality control, reducing capital or operating costs, and so on.

Recommendation 7 proposes that the court should be able, when granting a compulsory license, also to order that know-how be made available in conjunction with the patent.

Extend Remedy

Extending the compulsory license remedy to include know-how transfer is something that may cause some controversy, particularly among patentees. On the other hand, and notwithstanding the possibility of some practical problems, we thought the suggestion was worthy of an experiment. It would assist to reduce costs and increase benefits by avoiding patent abuse and encouraging local use.

It should be emphasized that compulsory transfer of know-how would be a discretionary remedy. It would only arise where the grounds for a compulsory license had been established to the court's satisfaction, and that means the reasonable requirements of the Australian public are not being met. Further, the order would be made on such terms and conditions as the court considered reasonable. Those terms and conditions would invariably include financial returns — in other words, an appropriate royalty to the licensor/patentee.

Notwithstanding all of that, the patentee would have the right, if there were no objections to making know-how available even on reasonable conditions, to abandon the patent and avoid the whole business. Even then there would be an advance, because one major impediment would have been removed from the path of the potential manufacturer.

The bias of the compulsory license provisions is presently focused very strongly on local manufacture. The committee saw room for adjustment to that principle also. Recommendation 9 proposes that compulsory licensing should be available even though the prospective licensee may not intend local manufacture, but wishes to import the patented goods. This would allow some import competition, and again would reduce the social costs of the operation of the patent system, particularly in cases where Australian patents were being used to maintain excessive prices by excluding imports.

Thus, to summarize, we saw compulsory licensing as having the potential of greater application with more beneficial results. Greater access to know-how may assist, as may allowing increased import competition. Increased use of the compulsory license provisions may also result from another of our recommendations that the discretionary remedy of compulsory licensing should be available to the court in dealing with anticompetitive behavior and breaches of the Trade Practices Act.

PATENT TERM

One of the most difficult matters that the committee faced was the question of how long should a patent run for. Recommendation 11 deals with the term of standard patents. This is a very important issue, because changes in the term would add to or reduce social costs of patents as well as the incentive for innovation. Considering the empirical data, which was inadequate, two members of the committee considered the term should be reduced from 16 to 10 years. The majority considered that the term should remain unaltered. This reflected the view that a reduction in term could well involve significant losses, while, on the other hand, significant benefits were not seen to arise from an extension to the term, particularly having regard to local innovation.

We did not accept that there was a real international trend to a 20-year term, or if there was, that Australia should join it. In fact, the supposed trend to 20 years is mainly in western industrialized countries. More broadly, the terms in other countries range from 3 to 20 years with about five different starting dates.

The committee did agree that the existing procedures that enable patent term to be extended in some cases should be abolished. We were conscious of the views put, particularly by the pharmaceutical and agricultural and veterinary chemicals industries, that it can take 7 to 10 years to develop a new product.

In such industries large numbers of new compounds are produced, but out of those, and at a cost of many millions of dollars, only a few new commercial products result. The difficulty is that a number of years are often lost in complying with rigorous government regulations before marketing can be commenced.

The argument runs that such manufacturers should be entitled to a longer term to encourage them to spend more money on innovation and bring more new products to the market. I have to say that three members of the committee were persuaded by that type of argument, and felt that equity would require an extension of up to four years where there was a regulatory delay. The majority of the committee was not so persuaded, for the economic reasons mentioned above and in the report.

PETTY AND STANDARD PATENTS

Another reason for the majority recommendations concerning term was that we wished to encourage greater utilization of the petty patent system. Petty patents provide a form of protection that can be granted very quickly (often in about three months). The procedure is very simple, quick and effective. We wished particularly to encourage Australians to utilize that system.

We considered that the present requirements relating to obviousness and novelty for petty patents should be substantially retained, but Recommendation 13 proposes that the level for standard patents be raised by testing them against documentary publications available anywhere in the world, rather than, as at present, just in Australia. That would represent a move, in the case of standard patents, from the present standard of local or domestic novelty to a new standard of universal novelty. There is a proviso that material disclosed orally or by use be considered only if the disclosure or use is in Australia.

Another proposal to make the petty patent system

more attractive arose from criticisms that the one claim allowed in a petty patent is insufficient, making the drafting of specifications difficult and expensive. We concluded that three claims should be allowed, provided that they are dependent claims. We were informed by the Patent Office that there would be a negligible increase in the costs of considering the extra two claims, and we hoped that the change would make petty patents more attractive to patent attorneys and their clients.

The committee believed that greater use of the petty patent procedure would lead to a reduction in the social costs associated with patents. Recommendation 18 therefore proposes that applicants be obliged to make a choice between standard and petty patent protection at an early stage in the application.

But one of the main current uses of a petty patent is as a means of taking rapid action against an alleged infringer while a standard patent application is pending, and our proposal could therefore raise the disadvantage of a loss of flexibility. Accordingly, we tried to provide some additional flexibility by recommending that the provisional specification procedure currently available for standard patents should also be available to applicants for petty patents. That would allow them, during the 12-month "provisional" period, to continue with their development of the invention to see if it is technically and commercially worthwhile. It would also allow applicants the time to carry out international prior art searches to have a better chance of assessing whether in fact the invention is patentable as well as worthwhile.

The availability of expedited examination, under which it is only a matter of weeks before the examiner's report issues, also mitigates the loss of flexibility which would result from being forced to choose between petty and standard patent applications.

In summary, we believed that increasing the number of claims permissible, and making provisionals available to petty patent applicants, combined with the procedure for expedited examination and also with the removal proposed by Recommendation 29 of the opposition procedure (which can be used by an opponent to delay the issue of a patent and so to delay infringement proceedings) would make the petty patent system more flexible. I should add that there was a dissent by one member on some aspects of the petty patent recommendations, for reasons set out in the Report.

OTHER MAJOR CHANGES

Recommendation 22(i) is a most practical recommendation. One of the biggest complaints I hear from our technical people as users of the patent system is that they have difficulty in understanding the legalese and jargon of patent specifications. Recommendation 22(i) would require a plain English abstract so that any qualified technical person can read it very quickly and easily. Recommendation 22(ii) is designed to make it possible to use patent information without having to worry at the same time about copyright. Avoidance of any possible conflict between the two areas of law would be of benefit to Australian manufacturing industry.

In an attempt to save costs in examination, Recommendation 26 proposes, in cases such as where there are patent applications in overseas countries and searches have been already made, that any prior art be advised to the

Australian Patent Office to assist in the process of examination. Again, this aims at stronger patents and a reduction in social and administrative costs. These objectives are also reflected in Recommendation 27, which proposes that obviousness as well as novelty should be considered by the examiner.

I mentioned earlier Recommendation 29, that pre-grant opposition be abolished. That, again, I regard as a major recommendation. In substitution for the opposition procedure, Recommendation 31 proposes a system whereby a patent can be "re-examined." The procedure would be *ex parte* and similar to that operating in the U.S.A. It would be available for three months after acceptance of an application or at any time after the grant of a patent, and both patentees and third parties would be able to apply for an application or patent to be reexamined.

The problem that hampered us most during our investigation and inquiry was lack of hard data, although substantially more data is available as a result of this inquiry. Recommendations 45 and 46 would require that certain information be made available or collected. It is currently a theoretical requirement that all license agreements be registered with the Patent Office, but that is ignored by most patentees unless they are about to start infringement proceedings.

The committee considered that this requirement should be made enforceable in a practical way. We were very conscious that license agreements contain sensitive commercial information, and therefore a compulsory registration requirement would need to be subject to very stringent confidentiality restrictions. Only limited information would be made available on the Register — such things as the company name, the period of the license, and whether the license was exclusive or nonexclusive.

We concluded that more data about use of patents should be collected, for example, at every fifth year's renewal of patents. Patentees could be required to state a minimum amount of information concerning the actual use being made of the patent. The collection of this data would provide a far better basis for future policy decisions.

I have done little more here than mention some of the recommendations that seem to me to fall in the first category of major changes in principle or approach. I have not discussed the recommended changes in administration, but I feel that some are likely to have a significant impact, and they should not be overlooked. For example, Recommendation 35 proposes that patent law matters be transferred from the various Supreme Courts to the Federal Court (which is already involved in Trade Practices matters).

DISSENTS

This report is not unanimous throughout. That is part of the problem of having a committee whose members have widely different backgrounds, experience and insights. We are all involved in the field, and everybody had strong views. Given the composition of the committee, it would seem unlikely that we might come up with some brave new world that would resolve all problems and lead to a patent system utopia. Only a committee of one might achieve that. I took the view that the diversity should be regarded as an advantage and that, even if we had to compromise in some areas, we should aim to arrive at a report

that would be worthwhile, practical and generally acceptable to all patent system users. By and large I believe that objective was met, although a compromise on the question of patent term was rather hard to achieve.

In Table 2 are listed those recommendations where there is not unanimity. There are six areas mentioned, which in fact is not very many. Most of them I have referred to earlier, and I will not comment further now. In addition there are two matters shown in brackets.

RECOMMENDATIONS NOT UNANIMOUS

Recommendation	Subject	Section	Page
7	Transfer of Know-How	B 4.5	32
10	Infringement by Importation	B 4.8	35
11 (i)	Term - 10 Years	C 5	37
11 (ii)	Extensions - Up to 4 Years, For Regulatory Delay	C5	39
12	Exclusion of Chemicals From Patentability	C 6	41
18 (i)+(iii)	Petty Patents	D 7.4	49
(20)	Employees' Inventions	D 9	52)

(Plus Dissenting Statement by Professor D.M. Lamberton 79)

Table 2

The first bracketed item is Recommendation 20 concerning employee inventions, on which the committee felt that further study was worthwhile even though there is some doubt about the possible impact. At present, if an invention is patented an employee is entitled like anyone else, in appropriate circumstances, to apply for a compulsory license.

If the invention is not patented but is published and in the public domain, then no problem arises. If the invention is being used by the company, then no problem arises. In other words, the issue really arises only where there is no patent, no publication, and no use by the employer, so there is only a very small area in which some employee rights could have a role.

Nevertheless, some 34 other countries already have laws that grant rights to employee inventors, and there was support for the view that it needed a much larger study than we were able to give. This issue is mentioned on this table, notwithstanding that Recommendation 20 is unanimous, because the committee was divided on the issue of the merits of or need for employee rights in Australia.

The second bracketed item in Table 2 refers to the dissenting statement by Professor Lamberton, and I have not attempted to classify or insert in the table the nine

particular points he lists.

SOME PERSONAL PERSPECTIVES

The role of the patent system in encouraging invention and innovation is subtle and varied. It has nowhere near the impact of the decision to introduce 150% tax deductibility for R&D expenditure, which is immediate and dramatic. Let me give some examples from my own experience of cases where patents have been involved.

The first is the Worsley project in which BHP is involved. We, with Reynolds, Shell and Kobe, have an investment in excess of \$1 billion at Worsley in Western Australia. Among the agreements setting that up was a technology agreement that related to the mining of bauxite, refining to alumina, and transport and treatment of alumina. There was a significant seven-figure amount payable for the technology. It was only just before the agreement was signed that consideration was given to the one patent involved. The patent system had little relevance or influence on investment and innovation in that particularly significant project.

On the other hand, and at the other extreme, the patent system is essential for an entrepreneur like Ralph Sarich with the orbital technologies for automotive and marine engines. In that project, we have lodged 36 provisional patent applications, of which 18 have been dropped and 18 patent families are proceeding. Assuming that Sarich achieves technical and then commercial success, it will be the patent system which will have allowed him that opportunity. A patent is not a guarantee of profitability, but it is essential in order to at least ensure the opportunity.

One final example is the use made of the patent system as an information source, for such purposes as patenting and licensing activities and reviewing technologies and solving technical problems. Before 1983 BHP obtained approximately 300 patent specifications annually. The figure is now running at an annual rate of 1,400 specifications, reflecting throughout the Group a substantial increase in the awareness and use of patent information.

In conclusion, I can advise you that the government has sought comments on the report, and ask that you write to the Commissioner of Patents with your views. Expressions both of agreement and disagreement would be valuable. Both kinds of comment are worth making, although I imagine you would need to make more extensive comment on areas of disagreement. This is important, because the government will be considering the report, and all submissions, before deciding what amendments should be made to the legislation.