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Dear Ms Moore

Towards a Stronger and More Efficient IP Rights System

Thank you for the opportunity to comment on IPAustralia's consultation papers.

In *Getting the Balance Right* it is pleasing to see that IPAustralia is supporting moves towards increasing Australia's very low inventive threshold for grant of patent monopolies. The existence of many highly obvious Australian patents creates a great deal of "noise" and expense for other innovators. Australian innovators will be much better off with a high inventive step requirement—this will reward globally competitive innovators at a much lower cost than under the present system with its very low standards.

I have no particular expertise in the areas of enablement, full description and fair basing and will not be commenting on these sections of the consultation paper. The general thrust of these proposals does however seem reasonable.

In section 4 of the consultation paper a number of modest steps to achieve a small increase in the height of the inventiveness threshold are put forward. I would like to preface my comments on these specific proposals by commenting on the perspective evident in the consultation paper. This perspective—that the exchange in the patent system is of a monopoly for information disclosure—is not consistent with an economic perspective on how the patent system works.

From an economic viewpoint the key issue is whether the patent system delivers benefits that exceed its costs. That is, does the total social benefit derived from patented inventions *that are induced by the patent system* exceed the total social cost of all granted patents? Only where the answer to this question is positive can we safely conclude that Australian economic well-being is enhanced rather than reduced by the patent system. It is likely that only a very small proportion of granted patents cover inventions induced by the Australian

patent system. To increase the chance that the patent system adds to, rather than subtracts from, economic well-being it is important to minimise the grant of patents to inventions that would occur anyway. It is also important that the inventive step threshold be designed so that it ensures a genuine likelihood that there will be benefits flowing from patented inventions.

To some extent your paper recognises these fundamental propositions. However it does not recognise that for there to be positive externalities arising from granted patents there must be *genuine new knowledge or know-how* that can spill over to other players in the economic arena, thus leading to dynamic growth benefits for the country. From an economic perspective these dynamic growth benefits are the source from which the static monopoly and transaction cost losses of the patent system must be offset.

I cannot agree with the proposition in the consultation paper that these benefits merely take the form of information disclosed in the patent specification. Unless this information embodies genuine new knowledge or know-how, it is impossible for there to be any positive benefits flowing from it. As repeated surveys have shown, researchers very rarely use information in patent specifications for technological development purposes. The greatest use of patent information is for purposes to do with use of the patent system. This was vividly illustrated in work undertaken for the 1984 IPAC review of the patent system and has since been confirmed in many other surveys. Indeed the only entities claiming that patent specifications contain valuable technological information are patent offices. This evidence is summarised in my forthcoming book chapter on the costs and benefits of patent systems, which I have provided to you. The underlying perspective in the consultation paper—that the social benefit derived from the patent system is simply the disclosures in patent specifications—is to confuse a condition of the patent grant with its objective (see Ghosh, 2004). This very limited perspective leads to only very low goals being set in respect to the proper height of the inventive step.

When the broader perspective outlined above is set, it is evident that a welfare-enhancing patent system requires a very much higher inventive threshold—a contribution of at least a moderate quantum of new knowledge or know-how. The consultation paper indicates that overseas jurisdictions are concerned that their own thresholds are set too low, and are taking steps to correct this. As a technology-importing nation, Australia should aim for a very high inventive step ("strong" in the language of the consultation paper). Australian innovators are capable of genuinely inventive work and should be rewarded with patent monopolies only when such standards are reached. The objective should be that each granted monopoly is for an invention where there is at least a reasonable likelihood that there will be a net benefit to Australia from the grant. If this is not achieved then it is almost certain that Australia's patent system will be welfare-reducing. This point was demonstrated in 1951 by Edith Penrose.

Thus to aim to increase the inventive step only to the standards in other jurisdictions is to agree to maintain a patent system in Australia that makes Australians worse off. The goal of the patent system is not only to encourage innovation. It must also do this in a way that makes Australia better off economically, not worse off.

The proposed changes move in the right direction, but will, in my view, lead to only a very modest increase in the actual inventiveness threshold. I note that Proposal 4.1, that common

general knowledge in Australia be deemed to be global common general knowledge, was proposed by the government in 2001, but was defeated in the Senate. I trust that this time IPAustralia will undertake appropriate educational activities so that Senators from minor parties can understand that the grant of monopolies for uninventive inventions does Australia no service.

I was delighted to see that there is finally a proposal to correct the massive hole driven through the patent system by the 2006 *Emperor Sports* decision. As I said in my submission to the ACIP review of patentable subject matter, this judgement made a mockery of both the idea of an objective test of inventiveness and of any balance between the grant of a monopoly and the public interest. I strongly support that part of your proposed change 4.2.

I would however, suggest that it is also time to remove all other restrictions on what existing knowledge can be used for both the novelty and inventiveness tests. It is not possible to have a high inventive standard when existing knowledge can be ruled out of the test for inventiveness. As I noted above, if the "invention" does not contain new knowledge or know-how, then it is not possible for there to be any benefit to Australia through the monopoly grant. The restrictions on allowable knowledge are used to confirm grant of patent monopolies for well-known techniques, as in the 2001 *Welcome Real-Time* case where a patent for well-known dynamic storage techniques was granted because it would not have been known to an expert in loyalty programs. I would suggest that you also remove the requirement in Section 7(3) that existing knowledge be regarded as relevant. This wording allows judges to narrowly delimit technology fields, to the detriment of Australian innovators and consumers.

Based on my research on recently granted Australian patents, and evaluation of the rules and procedures invoked in the "prosecution" phase, I consider that the current procedures allow grant of a patent for "marginal difference". There seems to be absolutely no requirement for inventiveness in any normally agreed meaning of the word. Removal of all restrictions on what existing knowledge can be used in the inventiveness test would do much to overcome this major deficiency and re-introduce a meaningful inventiveness test.

I commend proposal 4.3 which reverses earlier welfare-reducing legal decisions which had the effect of reducing the inventiveness threshold to virtually nil. I would also recommend that you take the opportunity to overturn the welfare-reducing view introduced by the 1980 *Minnesota Mining and Manufacturing Co v Beiersdorf (Australia) Limited* case, that combinations are not obvious unless there is direct evidence to that effect. There is no market for writing down the obvious, so this test is welfare-reducing for Australian consumers and innovators. This case is cited in the Patent Examiner's Manual (Section 2.5.3.5) to the effect that examiners are severely curtailed in their ability to reject obvious combinations. I understand that an earlier policy rule was that to be patentable a combination had to contribute a useful effect that both exceeded the sum of the parts and was unexpected. I strongly recommend that the *Patents Act 1990* be amended to over-ride this decision, and return the policy procedure to that earlier requirement. This legal judgement has strongly contributed to the very low height of the inventive step in Australia and should be overturned without further delay.

I would also like to recommend removal of the limitations on existing knowledge which can be used in the novelty test. This test has effectively become defunct because of the limitations on existing knowledge introduced by an English judge in the late nineteenth century. As your consultation paper indicates, we now live in a world where inventiveness is the norm and where we all have virtually instantaneous access to a wealth of information. To continue with the limitation in the novelty test to a single piece of knowledge is both absurd and welfare-reducing. Effectively all limits of existing knowledge should be removed from the Act, except the requirement that the knowledge be public at the priority date. Such a change would do much to ensure that it was not possible to obtain a patent unless there were a genuine contribution to knowledge or know-how, and therefore at least some likelihood of a benefit to the Australian public.

I note that in regard to full and fair descriptions of the invention the consultation paper suggests some limits to redrafting specifications. The ability to redraft specifications during the examination process was, I believe, introduced in 1953. Patent Attorneys have now developed this re-drafting capacity into a fine art, and effectively use it to focus on minor variations from existing knowledge identified by patent examiners. Re-drafting should be limited to narrowing the scope of a claimed invention, not changing it. If changes which did not have the effect of narrowing the scope of the claimed invention were eliminated, many patents granted where the "inventiveness" is effectively "narrow difference" would be eliminated. These are worthless "inventions" and granting monopolies for them simply reduces Australian well-being.

Turning to Section 5 of the consultation paper I fully support the view expressed that the Commissioner should be able to refuse grant of a patent on all grounds that would make a patent invalid at any stage. There has been insufficient recognition of the high cost to the community of the grant of many very uninventive patents. The strong biases against challenge to invalid patents are well documented in the academic literature. Further there are many opportunities for the owner of a genuine invention to challenge refusal to grant a patent monopoly. A welfare-enhancing patent system will therefore lean strongly towards avoiding the error of granting patents for uninventive inventions. There are thus major welfare benefits for all Australians, and especially for innovators and consumers, if the system is re-designed to ensure rejection of applications unless these are genuinely inventive and have a reasonable prospect of providing a benefit to Australia.

Against this background I strongly support proposal 5.1 to include usefulness in the grounds for refusal of a grant, proposal 5.2 to include prior use in the existing knowledge that can be used in the novelty and inventiveness tests and proposal 5.3 to expand the grounds for re-examination. I would also suggest that the grounds for re-examination require the Commissioner to re-examine granted patents whenever the academic literature points to probable invalidity. I would also strongly suggest that fees for opposition or re-examination be refunded where a patent is revoked or grant refused. Special consideration should also be given to creating avenues for genuine public interest groups, such as the Cancer Council, to request re-examination at no cost.

It is unfortunate that the *Patents Act 1990* contains a presumption in respect of grant: it is the patent office which has to demonstrate that the application fails the patentability tests. The system would be far more likely to create a benefit for Australia if it were the applicant who had to demonstrate that the application passed all threshold requirements. I therefore

recommend that Sections 7(1) and 7(2) of the Act be amended to create the normal onus of proof for an applicant for a regulatory intervention in a market—that is that *the applicant* must prove novelty and inventiveness, not the government disprove it.

In regard to the standard of proof (proposal 6), certainly the shift from "benefit of the doubt" to "balance of probabilities" that occurred in the 2001 Amendments is an improvement. I note, however, that these clear and well-understood words are not reflected in the drafting. It is time that that government policy decision was fully reflected in the wording of the statute. Beyond this, the normal standard of proof for a regulatory intervention in the market is that there should be clear evidence of the need for the reduction in competition (see Competition Principles Agreement article 5.1). This is a "beyond reasonable doubt" test. I understand that lawyers consider this test only appropriate in criminal law. But the *Patents Act* implements economic policy not legal policy. It is therefore appropriate that the economic policy standard apply.

I understand that having two different sets of proposals for addressing and clarifying a research exemption to the rights granted by patent monopolies has presented difficulties. It is therefore pleasing to see concrete proposals on the table in the *Exemptions to Patent Infringement* consultation paper.

Again I would preface my comments with some general remarks. The rights granted by the patent monopoly system are extremely strong rights, preventing as they do almost every other use of the application of an inventive idea, whether independently derived or not. Simultaneous invention is frequent, both at the leading edge of science and technology, and more in relation to a range of consumer products. This suggests that an invention incentive in the form of strong monopoly rights is not in fact needed. Be that as it may, there are certainly grounds to review the range of exclusionary rights granted by patent monopolies. The so-called research exemption is just one of these. Others that need addressing include the prevention of manufacture for export of pharmaceuticals whose patents have expired overseas but not yet in Australia. Such an exemption would have no impact on the rights of a patent holder to exploit a patent commercially in Australia. It would, however, ensure that the monopoly granted in respect of Australia was not inadvertently extended to markets where the Australian parliament has no right to grant monopoly powers. There would also be a significant improvement in the cost-benefit equation if independent invention was introduced as a ground for defence in an infringement action. I trust that these issues will either be included in this exemption, or addressed in future consultation papers.

It is more than time that Australian researchers were granted the benefit of a clear research exemption. It is inefficient for the many leading-edge researchers and research organisations in Australia to have to deal with the current uncertainties, and action on this issue is overdue. With one exception I support the proposed change. Inclusion of the word "solely" is extremely dangerous to the underlying intent to provide a strong and clear research exemption so that scientific and technological research can progress unimpeded by legislated monopolies. The European Patent Convention excludes a number of areas from patentability. This has not prevented the European Patent Office from granting many thousands of patent monopolies in some of these excluded areas. In part, such undermining of legislative intent is permitted where an exclusion is narrowed, for example with the *per se* exceptions for software and business methods. As Bakels and Hughenholtz (2002) have clearly shown, exceptions must be so clearly worded that legal semantics and game-playing

cannot be used to undermine them. The research exemption is for research. It is unnecessary and dangerous to add the word solely. Should it emerge that the word solely is in fact necessary, this could be added by amendment. But it would be less costly to the Australian community to risk one or a few cases where granted rights could not be fully exploited than it would to risk continuing with uncertainty in Australia's large and internationally competitive research industry. Given the problems Australia has always had with commercialisation, the competitive advantage we have at the research stage is highly valuable, and this is an industry whose full development should not be impeded by legislated monopolies. I strongly recommend that no limiting qualifiers be applied to the exception in its final statutory form.

I commend IPAustralia for ensuring that the research exemption is interpreted as widely as possible by listing a range of research purposes, including the purpose of meeting regulatory requirements. I would strongly recommend that a catch-all also be included along the lines of "or any other research purpose". Like technology and invention our imaginations tend to be limited to what we can conceive of today. The directions and uses of future research may move in ways that would surprise us. The research exemption must be so broadly worded that researchers and research organisations cannot be in any way limited in their research work by the patent monopoly system. Indeed it may be preferable to make this an exemption which covers *any non-commercial use* in Australia.

I have elsewhere been a strong critic of many of the legal judgements in respect of Australian patent cases, and have argued that these welfare-reducing judgements are partly caused by the lack of any clear stated objective in the legislation. It would be appropriate for the drafting of the amendment on the research exemption to state the objective of this clause: that research activities in Australia not be impeded by any legislatively granted monopolies for other inventions. At a bare minimum these objectives should be clearly stated in the Minster's Second Reading Speech and in the Explanatory Memorandum.

Should you require references or substantiation of any of the issues I have raised in these comments, I would be happy to provide these.

I would be interested to know what other topics you plan to cover in your consultation paper series.

Hazel V J Moir Departmental Visitor 6 May 2009