Submisstions by Chris O'Sullivan, registered patent attorney to the ACIP Review of Patentable Subject Matter.

Thank you for your invitation to respond to the Review of Patentable Subject Matter. Addressing your specific questions:

1. Can placing limits on inherently patentable subject matter be justified on economic grounds?

YES. Competition is the foundation of the Australian and world economy, and the need for strong and healthy competition must be the driver of the patent system. However, the economic problems need to manifest before action is take to curtail the extent of patentable subject matter, and even then I suggest there are better solutions than mere exclusion; see my comments at **12**.

2. What would be the consequences on innovation of imposing or removing limits on patentable subject matter?

The existing prescriptions have been established over a long period of time and should not be disturbed lightly. For instance, lifting the food admixture exclusion could interfere with activities in every kitchen in the country. Adding new exclusions without a proper understanding of the **market of a new technology** is also likely to lead to grave unforseen problems.

Are you aware of any empirical data on such consequences?

On the macro level it could be argued that there is a connection between the European patent office's exclusion of computer programs from patentability and the fact that the European computer and software industries do not compare favourably with those of the USA where software is patentable.

3. Can placing limits on inherently patentable subject matter be justified on ethical grounds?

YES. But only because ethical consideration must always be taken into account in every sphere of life.

Is it appropriate for legislation to predetermine ethical limitations on patentable subject matter, or is it more appropriate for courts to determine such limitations on a case by case basis?

NO and NO. Regrettably ethical standards are prone to change, but not always for unethical reasons. For instance, once upon a time condom use was ethically suspect, but now their use is essential in the fight against AIDS. Legislation or court action early on to prevent patents being granted for condoms, or related technology, might have weakened our ability to fight AIDS effectively today. It should be a matter of public policy to decide whether a technology should not be patentable rather than a court matter.

Is patent law an appropriate avenue for dealing with ethical issues? If not, what is an appropriate avenue?

NO ... but there are good reasons for sometimes including ethical sections into patent law. For instance Section 18(2) of the Patents Act states: "Human beings, and the biological processes for their generation, are not patentable inventions." In the context of the patent system this section is unnecessary since human beings and the biological process for their generation are not new and already prohibited under Section 18(1)(b)(i). However, for the sake of reassuring the general public about these important matters it is a valuable inclusion in the Act.

4. What would be the ethical consequences of imposing or removing limits on patentable subject matter? Are you aware of any examples of such consequences?

It does no harm to reinforce ethical behaviour wherever possible, however imposing or removing limits on patentable subject matter seems to be a very blunt instrument for this purpose and could easily give rise to unexpected and unhelpful consequences.

5. Other than economics, ethics and national security, can placing limits on inherently patentable subject matter be justified on any other grounds?

YES. Generally inconvenient, see my later comments under question **7**.

6. Does the content of current Australian law meet the objectives of the system?

YES generally, but see my comment at the end of this question.

Are decision makers focusing on the appropriate principles?

I don't understand this question.

Is the legislative structure of current law appropriate for the content?

YES generally, but see my comment at the end of this question.

Is the current law clear to decision makers and users of the system?

I doubt lay users can understand the law at all.

Does the content or structure of the current test cause you any significant problems?

We (patent practitioners) have got used to it now but the Patents Act is **very badly** drafted. The laws and regulations for many issues are dispersed throughout the legislation in a way that makes it very difficult for the practitioner to assemble them for use.

7. Do you have any comments on issues A to H in Part 11.3.1?

- combination of flexible and prescriptive tests

A combination of tests is clearly to be preferred.

Having an organic basis for patentable subject matter is preferable to prescriptive tests (whether white lists or black lists), since an organic basis is able to grow and adapt to the excitingly uncertain future.

Having some prescriptive additions to the test allows policy to be effected without changing the underlying basis of the law. They should probably be reviewed more often, and as I have detailed at question **12**, should be introduced in more subtle ways than merely checking the box on "allowable/unallowable".

In any event new prescriptions should not be introduced in haste. When new technologies arise there is always a period of time during which the proper boundary of patentability is obscure – this is a necessary tension that cannot be adequately anticipated, but can be easily remedied.

The important point about prescriptions, in my view, is to test the new markets thoroughly before making decisions about prescription. Taking some examples form history: The current practices of patenting horticultural, chemical and medical products – all once anathema but never prescribed – are now important planks in our economy and our trade relationships with other countries. They came under the umbrella of patentability at the appropriate time through a refinement of the scope of the manner of manufacture. This seems to say a lot for the way in which the concept of manner of manufacture is able to self-adjust to public policy in an organic way without the need for prescription in every case.

-value of the existing body of case law

The phrase "manner of manufacture" has stood the test of time and is well understood by professionals involved with its operation in this country. The body of case law is extensive and provides a powerful **empirical basis** which can be further developed as new technologies emerge and advance.

The concept of Manner of Manufacture has proved superior to the US formulation "made by the hand of man" insofar as it has been found broad enough to cover "electrical oscillations" which are clearly of significant and growing economic importance.

The concept of Manner of Manufacture is also superior to a basis of only prescriptive tests; whether black or white lists.

- general inconvenience, mischievous to the state and hurt of trade

General convenience seems to be a useful ground for the occasional rogue patent like *Rolls Royce Ltd's Application* which had the potential to interfere with a pilot's ability

to use the aircraft controls to best effect when landing an aircraft. For this reason it should be kept but it is unlikely that it could be applied outside of court proceedings.

See also my comments under 'archaic language' next:

- archaic language

Much of the substance of Section 6 of the Statute of Monopolies has already been codified in various ways in the Patents Act. For instance the term, the nature of the grant, novelty, the rights of the inventor and their assigns, secret patents. Competition is codified in trade practises and other legislation. So I submit there is much to be said for excluding these things from the general formulation.

The principle for advancing the bounds of manner of manufacture, according to *NRDC*, involves the **use of analogy** to advance existing ideas about what is patentable in current technologies into new technologies. In my view the inclusion of this principle in a new formulation has much to recommend it.

If we take away all the things that are dealt with elsewhere and add the mechanism of *NRDC* we could end up with something very simple like this as a definition in our Patents Act:

“Patents are for any existing manners of manufacture, and for new manners of manufacture that are analogous in commercial respects with existing ones.”

- threshold of inventiveness

This is the BIG question for any patent system, if you get this right all the other problems recede as well. No jurisdiction seems to have solved this issue in a fashion that enables predictability. I think this would be a very important topic for enquiry (even more than the current topic since a clear understanding of what constitutes an inventive step could resolve the question of whether a subject matter is suitable for protection or not).

Whatever solution is adopted, the entire question of inventive step should be dealt with under that head and not fudged into manner of manufacture. In my view we would be better off if *Philips v Mirabella* had been dealt with under Section 18(1)(b)(ii).

- threshold of utility

This concept is rarely used and hard to apply. Arguably, there is always some use to someone for anything. If there is a desire to prevent useless inventions cluttering up the register then I suggest that the ‘working’ provisions be strengthened to make it easier to remove patents are aren’t being exercised. I can see no benefit in raising the cost associated with securing a patent at the outset; before the commercial usefulness has been tested in the marketplace.

- scope of rights awarded

This is another issue that is better dealt with by use of the 'working' provisions, for instance to allow a compulsory licence to ensure an improvement of a patented technology can be put on the market.

- requirement for grant

In general I think it would be better for the patent office to concentrate its efforts on the objective requirement of novelty, fair basis and clarity, rather than attempting to struggle with manner of manufacture and obviousness.. More extensive novelty searches would provide applicants and the public to better assess the value of a patent or application and this would serve the needs of the greater community.

8. Is it more important to achieve best practice or to harmonise with a major jurisdiction?

International harmonisation is the long term goal, since this will ensure equal accessibility and a level playing field for all. We should make every effort to achieve international harmonisation, in the meantime we should do what we can to harmonise with our important trading partners; provided this does not tie us into positions that will further complicate the longer term goal.

Are any jurisdictions preferable over others?

All our major trading partners.

9. Is Australian law compliant with our international obligations?

YES.

10. According to what you believe are the appropriate objectives and constraints of the patent system, what sorts of subject matters do you think should be inherently patentable and what should not?

I have put a case for an organic basis to the patent system resting on the concept of manner of manufacture, coupled with a separate policy exclusions. I generally support the existing policy exclusions and the way they have become codified separately. The main point I make about new exclusions is that they should not be generated in haste. They should be generated by policy makers. I also think that more imaginative solutions should be adopted than mere exclusions; see my comments at **12**.

Would your preferred content be compliant with Australia's international obligations?

YES.

11. What sort of legislative structure would be appropriate to achieve your preferred content identified in 10?

Our current legislative structure - an Act and Regulations - is adequate. It would be good to have the Act and Regulations redrafted as indicated at **6**.

Are any foreign structures preferred?

NO.

In principle, when should statutory provisions excluding specific subject matters be used?

Apart from the existing exclusions it is probably better not to attempt to codify this activity, but to leave that to the policy makers. However, in a situation where the market for a field of 'technology' demonstrates that patents are reducing innovation in that field, and other anti trust measures have not corrected it, then that would seem to be a good candidate for attention.

An example that comes to mind is the predominance of Microsoft operating systems and application software. Refusing to patent software does lessen to market distortion produced by Microsoft, but the real solution is to break it up into component parts, as was done to AT & T Inc - and which opened up the market for telecommunications. Our policy makers should be lobbying our friends in USA for this to happen.

Should such provisions be expanded, such as by including the exceptions from patentability allowed under TRIPS?

I see no value in introducing such provisions merely because they are allowable under some broader agreement.

12. Do you have any other comments?

I suggest that policy related limits are better placed on the subject matter via other mechanisms in the Patents Act than the definition of what constitutes the proper subject matter.

For example, in the area of pharmaceuticals the term of patents can be extended to address competitive unfairness that sometimes arises through delays in the approval process. Reduction of the term could also be applied, or some technologies could be restricted to Innovation patents; like the Utility Model in Germany. Another way of imaginatively addressing problems could be to restrict the remedy, so for example, an injunction could be made unavailable as a remedy for infringement of, say, a business method patent, but an award of royalties could be made.