# ‘EXEMPTIONS TO PATENT INFRINGEMENT’

## *Ensuring that patents do not inhibit research and development in Australia*

**A submission by:**

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**Statement of Interests**:
KCA is the peak body representing public sector research organizations engaged in technology transfer and commercialization of intellectual property assets. Current members of KCA can be viewed on the KCA website.

**Acknowledgement:**
KCA wishes to thank Drs Jensen & Webster at IPRIA for advice on this submission.

***Proposed Change***
A person may, without infringing a patent, do any act *on* a patented invention which is solely for the purpose of:
• determining how the invention works
• seeking an improvement to the invention
• testing the validity of a patent
• determining the scope of the patent claims
• determining whether an act or product infringes a patent or
• obtaining the information required for regulatory approval under Australian law or the law of any other country that regulates the manufacture, construction, use or sale of the patented invention.

The statutory exemption will not apply where the invention is used in, but is not the subject of, an experiment.

**1. Do you agree in principle with IP Australia's proposal?**

KCA believes in principle that a research exemption is justified on economic grounds, and that the current system is uncertain and warrants a statutory change to provide certainty to industry and public sector research organizations.

However, despite this in principle support, KCA believes that the current list of activities attracting statutory exemption (per the wording of the proposed change) is problematic and limiting, and will not maximise the generation or diffusion of knowledge throughout Australia.

In particular, we believe that the very last part of the proposed statutory amendment i.e. *"The statutory exemption will not apply where the invention is used in, but is not the subject of, an experiment"* is likely to have an adverse affect upon the level of innovation and knowledge generation where patented inventions are currently used in experimentation but not necessarily the subject of the experiment. We would argue that such activity is crucial in the innovation cycle and unnecessarily curtailing this research would be counter productive.

As such, KCA supports a reformulation based upon the rationale in response to question 2 below.

**2. Do you think that IP Australia's formulations are the best solutions?**

Whilst acknowledging the practical difficulties in precisely and completely defining those activities which should attract statutory exemption, KCA does support the list of activities which provide a legal excuse to patent infringement PROVIDED that any statutory exemption should also apply where the invention is used in, but is not the subject of, an experiment.

To maximise the welfare of citizens of a country, an economic system should optimize the incentive to invest in innovation while maximizing the diffusion of knowledge and ideas throughout society. This is a delicate balancing act which requires understanding the costs and benefits of knowledge creation versus knowledge diffusion.

The basic rationale for using research grants to support basic science is that such basic science has wide and varied potential applications (i.e. knowledge spillovers are potentially

large). Where knowledge spillovers are limited, patents provide an important means of stimulating investment in knowledge creation. However, even when patents are desirable, there are some circumstances in which exemptions from patent law may be desirable. KCA strongly supports the principle that basic science – for which there is no potential commercial outlet – should be exempt from patent law. Moreover, we believe there are good reasons to include 'experimental use' provisions in such a statutory exemption.

To put this more clearly:
*In our opinion, both public and private sector research institutions should have the ability to carry out research on granted patents provided such resulting research outcomes are not exploited without a licence from the patentee. It needs to be understood at the outset that such a licence may or may not be granted to the researcher.*

Of course, we recognise that there are some instances where the boundaries between 'basic' and 'applied' science may be blurred (i.e. it may be difficult to ascertain whether research has a 'commercial outcome'), but we believe that workable solutions could be found to solve these issues. In other words, we believe that the certainty provided to researchers in basic science from a statutory patent law exemption coupled with the potential benefits from knowledge spillovers greatly outweigh any problems associated with defining 'basic' and 'applied' science.

A more detailed exposition of our argument is as follows. Without public sector intervention, the economy will under invest in invention and innovation. A public grant scheme can supplement the incentive to invent and innovate without affecting the course of knowledge diffusion. However, raising the revenue for grants via taxation leads to distortions in economic behaviour and imposes administrative costs on society. In addition, peak or top-down grant bodies are unlikely to correctly identify all future innovations and we cannot therefore expect them to be comprehensive. The same caveats apply to incentives based on a scheme of prizes. Accordingly, there is a limit to how pervasive a grant and prize scheme can (or should) be. The patent system, which uses the democracy of the market to supplement and fill the gaps left by grant and prize schemes, constitutes the third tier of public innovation policy.

However, patents, by virtue of their monopoly nature, artificially limit the natural diffusion of knowledge and ideas and as such impose costs upon society. Society loses when valuable knowledge is left unused because it is priced above the additional cost (zero) of its use. Patents, and other forms of legally sanctioned monopoly, are therefore *only appropriate* where it can be demonstrated that the gains from stimulating knowledge in a specific area dominate the losses from restricting the use of that knowledge. The challenge for public policy is to codify these economic principles in a manner that is clear and unambiguous. It is especially important to codify which specific areas should be patentable. Any confusion and uncertainty in the boundaries around permissible behaviour will lead to economic loss.

It is generally believed that upstream, basic scientific research has large and far-reaching knowledge spillovers and thus should not be acceptable patentable subject matter. As the well-spring of knowledge, they embody ideas that are too important to be under monopoly control. On the other hand, some of these knowledge "spillovers" i.e. more applied research or that with clear commercial potential and with the ability to led to consumer end products and services might be better served through the patent process. In such cases, the intellectual

property asset needs to be protected down the patent pathway to better ensure commercialisation to end market.

In 2005, the ACIP (Advisory Council on Intellectual Property) published a report related to this very subject of research exemption and patent infringement. KCA is in agreement with the recommendations from that report which are detailed below. However, we urge caution with the words "unreasonably conflict" in the first recommendation which requires further clarity. This is broached in recommendation 2. In this regard, we consider that unless there has been a commercial outcome from the experimental research which requires a licence from the original patentee then a research exemption should be allowed.

**Recommendation 1**
The Patents Act be amended to establish the following provision:
The rights of a patentee are not infringed by acts done for experimental purposes relating to the subject matter of the invention that do not unreasonably conflict with the normal exploitation of a patent. Acts done for experimental purposes relating to the subject matter of the invention include:
- determining how the invention works;
- determining the scope of the invention;
- determining the validity of the claims;
- seeking an improvement to the invention.

**Recommendation 2**
Appropriate guidance be provided in the Explanatory Memorandum to the above amendment, explaining that the purpose of the exemption is to encourage the further development of patented fields of technology without unfairly devaluing patent rights or breaching the TRIPS Agreement, and that the exemption is not intended to derogate from any other exemption from infringement that exists under the Act.

We also argue that there is considerable confusion over the current status of researchers' freedom to operate in Australia. An Intellectual Property Research Institute of Australia (IPRIA) survey of public sector scientists in 2007 revealed that 23 per cent of all respondents believed that not-for-profit sector researchers do not need permission to use patented research tools and techniques when that use is purely for research purposes and a further 34 per cent were unsure. In relation to for-profit sector research, 10 per cent said permission is not required and 29 per cent were unsure (report available from IPRIA upon request). Introducing a statutory research exemption will not only make Australian policy consistent with sound economic principles, but will make the legal situation clearer and less ambiguous than the existing state of affairs.

In summary, we support a comprehensive research exemption – including a general exemption on the use of research tools.