



THE UNIVERSITY OF
SYDNEY

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Mr Peter Harris AO
Chairman, Productivity Commission
Intellectual Property Arrangements Inquiry
Productivity Commission
GPO Box 1428
Canberra City ACT 2601

By email: intellectual.property@pc.gov.au

Dear Mr Harris

Productivity Commission – Public Inquiry into Intellectual Property Arrangements

The University of Sydney welcomes the opportunity to comment on the Productivity Commission's public inquiry into Australia's intellectual property (IP) arrangements. Access to intellectual property on reasonable financial and administrative terms is fundamental to the core education, research and knowledge dissemination functions that universities provide for the benefit of their societies and economies.

Without compromising these fundamental objectives, the University acknowledges that certain inventions arising from its research require IP protection in order for their innovation potential to be fully released as new products, devices, methods or services.

Given the recent focus on unlocking Australia's innovation potential, it is timely to consider the operation of our current IP arrangements and the potential for improvement. There are three key areas of inefficiency that currently exist in the Australian IP arrangements, described briefly below.

First, a lack of IP ownership policy consistency across all Australian Government agencies when contracting universities and other not-for-profit organisations to conduct research often results in wasteful negotiations and lost innovation opportunities.

Second, there remain imbalances in Australia's patent and copyright laws that stifle innovation. The *Copyright Act 1968* currently lacks the flexibility and technological neutrality to balance the interests of rights holders with those of educators, researchers and students. For patents, there is currently a large degree of uncertainty around experimental usage, where research *on* a patented invention may be exempted, but research *with* the said invention may not be.

Finally, to create a start-up and SME-friendly environment, ways in which the enforcement of IP can be made more affordable should be explored. IP litigation in Australia is currently extremely expensive, and can be beyond the scope of those companies interested in commercialising IP from universities, research institutes and other not-for-profit research organisations.

In addition to the three key areas identified above, further detailed examples, solutions, and responses to the consultation questions posed by the Commission are attached, including discussion on:

- patent exemptions for experimental use;
- costs of obtaining patent protection;
- extensions of patent term for pharmaceutical substances;
- retention of the innovation patent system;
- scholarly publishing and dissemination of research outcomes;
- data and content mining for knowledge discovery;
- innovation in teaching and learning;
- 'contracting out' of fair dealing (or fair use) exceptions;
- access to orphan works, rare books and special collections;
- uncertainty around the application of flexible dealing; and
- joint ownership of intellectual property.

Should any further information be required from the University of Sydney in regards to this enquiry, please do not hesitate to contact Mr Tim Payne, Director Higher Education Policy and Projects in my office, tim.payne@sydney.edu.au , 02 9351 4750.

Yours sincerely,

(Signature removed)

Dr Michael Spence
Vice-Chancellor and Principal

Attachment: Detailed responses to consultation questions

University of Sydney submission to the Productivity Commission's inquiry into Australia's intellectual property arrangements, December 2015

The core IP problems stifling knowledge transfer for social and economic benefit in Australia

As one of Australia's leading research universities and as an innovator in education, research and knowledge transfer we wish to provide our views on the core Intellectual Property (IP) issues that affect us, and the higher education sector more generally, as a major contributor to Australia's innovation ecosystem.

The problems faced by the University of Sydney, described and discussed below, are the key inefficiencies that in our assessment exist in Australia's current IP arrangements. These challenges are not unique to this university, but are encountered by all Australian higher education institutions. This is evidenced by the parallel submissions made to the Commission by the Council of Australian University Librarians (CAUL) and the Society for University Lawyers (SOUL).

(a) Lack of consistent IP ownership vesting in the University

Principle 2(c) of the National Principles of Intellectual Property Management for Publicly Funded Research (the *National Principles*) states "*ownership and the associated rights of all IP...will be vested in the research institutions receiving and administering the grant as a way of recognising the inventive contribution made by the research institutions*".

Unfortunately, this principle is not applied uniformly by Australian Government agencies. There is often an expectation when dealing with Australian Government agencies that wish to engage or collaborate with universities in relation to research, that the agency will own all or part of the IP resulting from the university's inventive contribution. This is not conducive to the ongoing encouragement of research and innovation within universities and does not allow them to maximise opportunities for the promotion, dissemination and exploitation of the IP, resulting in lost innovation opportunities. In our experience, where we do not own the IP and hold the exploitation rights it is harder to find industry partners willing to invest time, funds and effort to commercialise this IP.

We regard the recent initiative taken by the Defence Science and Technology Organisation of the Department of Defence as an example where an Australian Government agency recognises the importance of intellectual property ownership vesting with their University partners. We encourage more agencies, particularly the Rural Research Development Corporations, to establish standard contracts which reflect this mutually beneficial position. In this way, the Australian Government can retain the ability to itself enjoy and implement the results of sponsored research, but allow universities to continue to develop and, where appropriate, commercialise such results unfettered.

It is our view that any review of the IP arrangements in Australia should include a whole-of-government review of research contracting arrangements used for funding research undertaken by universities and other not-for-profit organisations. Governments of many countries including the USA and Israel recognise that it is preferable for the ownership of the resulting IP to vest in the research organisations on the basis that they are best placed to promote the development, dissemination and exploitation of the IP.

(b) Imbalances in copyright and patent laws that stifle innovation

Copyrights

The University is a signatory to the *Hague Declaration on Knowledge Discovery in the Digital Age*, which seeks to foster agreement about how to “enable access to information for knowledge discovery in the Digital Age”.¹ By removing barriers to accessing, downloading and analysing the wealth of publicly accessible data that is currently available online, the next generation of researchers can seek answers to the great challenges facing society, for the benefit of the entire community.

Rapid advances in information technologies such as data and content mining, and innovations in educational technology, pose both great challenges and opportunities for Australians in the consumption, creation, protection and efficient regulation of copyright material. As an example, the *Copyright Act 1968* (Cth) (Copyright Act) is drafted in a technology specific manner. This means it lacks the flexibility and technological neutrality to balance the interests of rights holders with the interests of educators, researchers and students as we progress through rapid technological change.

In addition, the University of Sydney is an active innovator in its provision of educational services at home and internationally. The economic importance of this kind of innovation cannot be overstated. The University of Sydney operates in a highly competitive national and international marketplace where innovative educational services enhance the institution’s reputation and in some cases, distinguish its services from those of other service providers. Importantly, students now have a high expectation that information technology will be integrated into Australian university teaching and learning environments, giving rise to enhanced blended learning models, web-based learning environments and flexible access to lectures and learning materials. As a multi-billion dollar industry, the Australian education sector cannot afford to be disadvantaged by outdated copyright laws.²

Patents

The degree of uncertainty that exists around experimental use of patented technology is of particular concern to the University. In 2012 the *Intellectual Property Laws Amendment (Raising the Bar) Act 2012* (Cth) introduced a statutory exception to infringement for research and experimental activities to overcome the uncertainty that existed in Australia.

In our experience such uncertainty can act as a disincentive, discouraging researchers from undertaking research with patented technologies where there is a risk of being sued for infringement. Unfortunately, the statutory exception fell short of creating a safe research environment as s119C of the Patent Act is limited in scope and the exception only applies to “research on” the patented invention leaving “research with” the patented invention an infringing activity.

¹ The Hague Declaration on Knowledge Discovery in the Digital Age <http://thehaguedeclaration.com/>

² In 2013 – 2014, education was Australia’s fourth largest export industry. In NSW, education is the state’s second largest export after coal as reported by the Australian Bureau of Statistics, retrieved from:
<http://www.spre.com.au/download/ExportsAustraliaStates201314.pdf>

Australia is the third most popular destination for international students, contributing around \$15 billion in revenue per annum as reported by the Group of Eight Australia. Policy Note: International Students in higher education and their role in the Australian Economy, March 2014. Retrieved from <https://go8.edu.au/publication/international-students-higher-education-and-their-role-australian-economy>

(c) Effective enforcement of IP

If the University is to confidently assign or license its IP to its start-up companies and small to medium enterprises it needs to be sure that the IP has value. Affordable enforceability of IP is central to ensuring such value is retained and not lost as a result of weaknesses in Australia's IP dispute resolution system.

*"Patents promote research and development through helping to better capture returns from commercialising Australian ideas and products. However, in order to capture these returns it is vital that patents can be enforced in an expedient and cost effective manner. The costs of an effective enforcement system are not only borne by the commercial enterprises engaged in the dispute, but the costs are also borne by society at large. Inaccessible or ineffective patent enforcement is likely to result in lower levels of innovation activity, a reduced transfer of technology and a consequent reduction in economic growth."*³

In our experience intellectual property litigation in Australia is extremely expensive, resource intensive and the outcomes uncertain. Such litigation is beyond the scope of most start-up companies and SME's interested in commercialising University IP. If Australia is to encourage growth of new companies and investment of SME's into University owned IP then enforcement of those rights should be made affordable and efficient.

Solutions

(a) Ensure IP custodianship vests consistently with universities and other not-for-profit research organisations

We support the Group of Eight (Go8) universities' view that university IP is a national asset over which the sector has custodianship.⁴

We advocate for the adoption of principles which have been shown in other countries to have a significant impact on fostering innovation such as the principle that universities own IP created in all publicly-funded research (for example under the Bayh-Dole Act in the US and similar legislation subsequently adopted in other countries) should similarly increase the innovation output in Australia.

Such ownership would operate to positively support the University of Sydney's recently revised Intellectual Property policy that is directed towards support of a "research culture in which translational research, technology transfer and entrepreneurial endeavor are rewarded".⁵

Clarity of ownership vesting IP with universities and not-for-profit research organisations would vastly reduce the large amount of resources currently invested in negotiating research and commercialisation arrangements between universities and Australian Government agencies.

³ Advisory Council on Intellectual Property "Issues Paper – Review of post-grant Patent Enforcement Strategies" November 2006 retrieved from: <http://www.acip.gov.au/reviews/issues-post-grant-patent/>

⁴ "Draft general principles of an approach to IP that treats university IP as a national asset over which the sector is the custodian and which promotes open innovation partnerships to get this IP used". Go8 submission to Christopher Pyne (Industry, Innovation and Science Minister) entitled "Innovation 2016" retrieved from: <https://go8.edu.au/article/go8-media-release-go8-delivers-industry-and-innovation-work-plan-minister-communique>

⁵ Statement of Intent of the University's draft Intellectual Property Policy 2015.

(b) Correct the imbalances in Australia's copyright and patent laws

Modernisation of Australia's copyright laws is critical to bring them in line with international standards by providing flexible, technology neutral exceptions, greater legal certainty in the application of exceptions, and the appropriate balance between the legitimate interests of owners and non-commercial users of copyright material.

Developing a patent system that strikes the appropriate balance between the promotion of innovation and the free conduct of academic inquiry through experimental use exceptions is also critical.

(c) Ensure there is effective and affordable enforcement of IP

Effective and efficient enforcement of IP is a cornerstone to a robust and effective intellectual property system. However, enforcement of IP rights in Australia is hampered by the high cost and uncertainty of litigation. Most universities and small to medium enterprises (including University start-up companies and other commercial partners) would find it difficult to enforce their IP rights due to the high cost and uncertainty of enforcement.

The apparent success of the UK's Intellectual Property Enterprise Court (IPEC) is a potential model to improve access in Australia to affordable and efficient resolution of IP disputes, particularly where out-of-court solutions are impractical or ineffective.

In 2013, the IPEC underwent reforms to improve access for SME's by streamlining court procedures, reducing costs of litigation and speeding up resolution of claims including the introduction of a "small claims track". The IPEC is intended to hear less complex claims than those heard in the High Court and deal with cases where recoverable costs are capped at £50,000 and damages do not exceed £500,000. Since 2013 there has been a substantial increase in the quantity of cases filed. Recent research has found that the costs cap and the active case management by the IPEC judges largely accounts for this increase.⁶

We propose that such a court could operate to compliment the out-of-court mechanisms currently in place in Australia for the resolution of patent disputes including specialist mediation services set out on the IP Australia website.⁷

⁶ Helmers, C., Lefoulie, Y. McDonagh, L. (2015). "Evaluation of the Reforms of the Intellectual Property Enterprise Court 2010-2013" published by the UK Government. Retrieved from: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/447710/Evaluation_of_the_Reforms_of_the_Intellectual_Property_Enterprise_Court_2010-2013.pdf

⁷ Retrieved from: <http://www.ipaustralia.gov.au/ip-infringement/enforcing-your-ip/resolving-disputes/>

Comments on specific consultation questions

The questions set out in italics below are copied from the Productivity Commission's Issues Paper. In addition, other comments that are relevant to the enquiry are set out in the section "Additional Issues for Discussion".

Patents

Are there aspects of Australia's patent system that act as a barrier to innovation and growth? If so, how could these barriers be addressed?

1) Experimental use exemption

In order to facilitate innovation universities need to be free to conduct research and experiment with patented inventions without risk of infringement.

In 2009 the Go8 made the following submission to IP Australia, "*Getting the Balance Right and Exemptions to Patent Infringement*":

"The Go8 submits that the impact of the discoveries and scientific progress which are achieved as a result of academic research is so important as to justify promoting the free conduct of that research by including a clear statutory exemption in the Patent Act for research undertaken by at least not-for-profit research organisations."

In 2012 the *Intellectual Property Laws Amendment (Raising the Bar) Act 2012* (Cth) amended the Patents Act to introduce an experimental use exemption from patent infringement.

In 2015, the following key questions arise:

- "is the exemption broad enough to meet the above objectives of promoting the free conduct of research?" In our experience the answer is "no". Under the Patents Act the exemption is limited to experiments "on" the patented invention. As a result research "with" the patented invention may be an infringing activity. University researchers and students are not likely to consider this distinction when conducting research and lack the resources and expertise to search the patent literature prior to conducting research.
- "are Australian universities protected from narrowing of the experimental use exemption as occurred in the USA in *Madey v Duke*⁸?" This Federal Court decision is often referred to as the decision that "seals the coffin on the experimental use exception for private universities."⁹ In *Madey v Duke* the court narrowed the meaning of experimental uses to those uses that are conducted for "amusement, to satisfy idle curiosity, or for strict philosophical inquiry" including research that is done "in furtherance of the alleged infringers legitimate business" such as university research. As a consequence private universities in the USA may be sued for making or using patented technologies for research purposes (public universities on the other hand enjoy sovereign immunity). We are concerned that such an outcome is possible in Australia and may be avoided by clarifying and broadening the statutory exemption for patent infringement for research conducted at universities.

⁸ 307 F 3d 1351 (Fed. Cir. 2002).

⁹ <http://scholarship.law.duke.edu/cgi/viewcontent.cgi?article=1081&context=dltr>

2) Cost of obtaining international patent protection

Universities bear the financial risk of patenting new inventions until the patent is licensed or assigned, at which point the licensee or assignee will usually assume responsibility for such costs. The high cost of National Phase protection and subsequent translation costs frequently result in the abandonment of patent applications, resulting in loss of commercialisation opportunities and, in some circumstances, loss of innovation opportunities.

When a patent reaches National Phase this University faces a difficult decision. If there is no licensee or assignee for the patent then the patent will usually be allowed to expire as the cost of proceeding is too high. This means that we have a very short time period in which to find a licensee / assignee for the patented invention, usually 30 months from the date of provisional application. For some technologies this is a very short window of opportunity. We estimate that approximately 45% of our provisional patent applications are abandoned at National Phase largely due to cost.

It is impossible to quantify the loss of innovation associated with this practice. However, there are a few examples where we have taken great financial risk to undertake National Phase applications (including European designations) for technologies that are now successfully licensed to industry partners where invention may be used to benefit of the community. In one instance, the University invested over \$400,000 AUS dollars across several patent families prior to securing a license for the invention. In our experience, this kind of speculative investment by an Australian university is extremely rare.

Ongoing efforts to globally harmonize patent application, examination and administration processes should result in reducing the cost of international patent applications overall. However, these are long-term initiatives and we recommend that short term measures are needed to reduce administrative costs. For example: adoption of official languages for all patent applications, such as those stipulated by the European Patent Office that requires the patent application to be submitted in English, French or German at PCT phase.

Other short term measures that may alleviate this situation include subsidies, grants or fee reductions made available by the Australian Government.

3) The current extensions of term for pharmaceutical substances are too short

Currently, eligible patents may have their terms extended by up to five years. In our experience, this extension is too short to account for the long development and approval time for most pharmaceutical and biotech patents. As a result there is a short window of opportunity in which the invention may be exploited and costs recovered before it is in the public domain.

We expect this is one of the issues that drive the high cost of some pharmaceutical products in Australia. However, this is a complex issue that has been the subject of much public debate including the Australian Government's *Pharmaceutical Patent Review Report (2013)*¹⁰ and more recently it has arisen in the context of the Trans-Pacific Partnership agreement.

¹⁰ Harris, T., Nicol, D., Guien, N. 2013 *Pharmaceutical Patents Review Report*, Canberra.

4) Retention of the innovation patent system

In 2011 the Australian Government Advisory Council on Intellectual Property commenced an investigation into the effectiveness of Australia's innovation patent system. Following the release of its inconclusive final report in 2014, the Council issued a belated assessment in May 2015 that the innovation patent is not achieving its objectives to stimulate innovation among SMEs, and that the Government should consider abolishing the system.

We believe this system should be retained as it provides universities with an additional option to secure a degree of protection for innovations for which standard patent protection may not be achievable or desirable. Such circumstances might include protection of an incremental advance on existing technology, or where the invention has a shorter expected market life.

What scope is there to better leverage the economic benefits of patents, by taking steps to improve the diffusion of patent information?

Traditionally, universities disseminate patent information through academic publication, conferences and industry events. The dissemination of patent information through IP Australia, WIPO and international patent offices is secondary to academic publication. However, Australian universities are increasingly taking advantage of new digital marketplaces to bring patent information to the attention of businesses most likely to invest in further research and development or take up a license to use and exploit the patented invention.

New patent marketplaces such as IP Australia's "Source IP" (aims to make public sector patent information more accessible to Australian businesses) and WIPO Green (aims to connect "green technologies and service providers with those seeking innovation solutions"¹¹) are just two examples of alternative means available for the dissemination of patent information.

Though it is too early to conclusively evaluate the effectiveness of these initiatives, we generally support any such innovative and cost effective means to market patented inventions that increase the likelihood of successful commercialisation.

Copyright

In August 2015, the Go8 requested feedback from its member universities, to inform representations to Government about issues arising from provisions in the Copyright Act that adversely impact university education, research, access to information resources, and community and industry engagement.

We provided several examples to illustrate the ways in which, our assessment of Australian copyright law hinders innovation in education and research at a local level, and has a broader negative impact on the Australian Government's *Science and Research Priorities*¹² and strategic initiatives to strengthen researcher education and increase commercial returns on investment in research.¹³ Some of these examples and other issues raised by Universities Australia in its 2013 submission to the *Australian Law Review Commission* are set out below for further discussion.

¹¹ Lybecker, K. and Lohse, S. (2015): *Innovation and Diffusion of Green Technologies: The Role of Intellectual Property and Other Enabling Factors*. Global Challenges Report, WIPO: Geneva. Found at: <https://www3.wipo.int/wipogreen/en/>

¹² Australian Government. *Science and Research Priorities*. Retrieved from <http://science.gov.au/scienceGov/ScienceAndResearchPriorities/Pages/default.aspx>

¹³ Australian Government: Department of Industry and Science. *Boosting the Commercial Returns from Research*. Retrieved from <http://www.industry.gov.au/industry/IndustryInitiatives/Pages/Boosting-the-Commercial-Returns-from-Research.aspx>

Intellectual property principles applied to copyright (section 3)

Do IP rights encourage genuinely innovative and creative output that would not have otherwise occurred? If not, how could they be designed to do so? Do IP rights avoid rewarding innovation that would have occurred anyway? What evidence and criteria should be used to determine this? Are IP arrangements in other jurisdictions more effective in generating additional creative output?

For certain individuals it is not the intellectual property system that encourages creativity, innovation and authorship. An example is the case of university academics in relation to peer-reviewed journal articles and the dissemination of findings of university or Australian Government funded research. In our experience, an academic's research and creative output is largely driven by an incentive to establish and enhance their reputation and career, and encourage open and informed debate in their discipline. The receipt of remuneration or royalties from scholarly works is not a primary incentive to publish.

A critical foundation to Australia's innovation system is the ability to openly disseminate the results of publicly funded research. However, in the research publishing context, the copyright system in Australia does not strike the right balance between the incentives for investment in innovation and research, incentives for publication, and the interests of those who wish to provide public access to publicly funded research outputs such as scholarly articles for non-commercial purposes. There is an unreasonable constraint on the ability of Australian universities to grant open access to scholarly articles published by commercial publishers after a reasonable period of commercial embargo, even if the underlying research was funded by the Australian Government or State Government agencies, or an international funding body. This constraint makes it difficult for the community at large to build upon the ideas of others, and impedes innovation in the development of public and open education models such as OER (open education resources) and MOOCs (massive online open courses) that seek to enable public access to high quality education resources and education experiences.

To what extent does the IP system actively disseminate innovation and creative output? Does it do so sufficiently and what evidence is there of this? How could the diffusion of knowledge-based assets be improved, without adversely impacting the incentive to create?

Australia's current copyright system attempts to encourage creation of new works, and address imbalances between rights holders and others seeking to use those rights, through a number of specific exceptions such as fair dealing. As discussed above, however, in our assessment the current provisions do not correctly balance competing interests to enable universities to disseminate publicly funded research outputs to the academic community after an appropriate period of embargo (to protect the publisher's commercial interests), without incurring excessive administrative or licence costs. The broader community should be in a position to benefit from access to high quality, publicly funded research and education resources for non-commercial purposes.

We recommend the statutory exceptions in the Copyright Act should be sufficiently flexible for those works to be used by research and education institutions for education and research purposes that would otherwise require permission (eg. in a MOOC, or to fulfil the access requirements of Commonwealth research funding agreements). In relation to those works for which the copyright system is the incentive to create (eg. creative works such as novels or scholarly monographs), access and permission costs need to be reduced, and the rights clearance process needs to be less time consuming and costly.

What, if any, evidence is there that parties are acting strategically to limit dissemination?

In our experience, rights holders often limit dissemination of works by charging excessive, and in some cases, prohibitive amounts to use their content in open education contexts (eg. MOOCs).

A recent example included a proposed use of a diagram and excerpts of a commercial research report within a MOOC video and reading list. The University was unable to obtain a licence for a diagram and excerpts (part of a larger report) from the rights holder for a reasonable price, despite the University holding a site-wide subscription to the product, and despite the support of the company's regional account manager.

Because the MOOC was to be made openly accessible to the public, the use fell outside of the terms and conditions of the University's access to the product. The University determined that it could not rely on the Statutory Licence, fair dealing or flexible dealing exceptions due to legal uncertainties and a lack of case law on these exceptions. The rights holder would allow the University to include the diagram and excerpts in a MOOC if it purchased a commercial reprint right to the document, for a fee of approximately AUD \$40,000.00. The fee was prohibitively expensive and the University declined to pursue the reprint right.

As a consequence, the content was not used and the University spent additional time and effort redesigning the course module to omit the diagram. The quality of 3rd party content in the redesigned course module may be compromised by this omission – as the University's MOOC presenter is now unable to illustrate points regarding a key visual resource and excerpts from an important piece of commercial research. The University considers that the use of this resource in an educational MOOC would not have had any negative commercial impact on the rights holder.

Are there sufficient safeguards to ensure that IP rights do not lead to unduly restrictive market power?

In relation to the trade in, and licensing of, copyrights in scholarly articles, there are insufficient safeguards to ensure that copyrights do not lead to an unduly restrictive use of market power. Under the current copyright system, educational institutions (and in some cases, individual academics) often pay multiple times for each scholarly journal article. For example:

- The academic writes a journal article in the course of their employment with the university, and submits the article to the journal. In most cases, the publisher takes an assignment of copyright or an exclusive licence.
- The University's Library pays a direct licence fee to subscribe to a journal on behalf of the University. Licence fees for a subscription products range between approximately \$AUD 500.00 (individual journal) to approximately AUD \$2,000,000.00 (for a large subscription database product).
- The University, faculty or individual academic may choose to pay an open access article processing charge to enable open access to their article – a key policy requirement of Australian Government agencies and international research funders. The average article processing charge has been calculated at USD \$906.00, ranging between USD \$8.00 and USD \$3,900.00. Journals from major international publishers, hybrid journals (mix of paid open access and library subscription) and journals in biomedical fields charge the highest fees overall.¹⁴

¹⁴ Solomon, D. J. and Björk, B.-C. (2012), A study of open access journals using article processing charges. Journal of the American Society for Information Science and Technology. 63: 1485–1495. doi: 10.1002/asi.22673

- The journal article may be counted in an annual survey under Part VB of the Copyright Act. The university sector as a whole pays statutory licence fees to the Copyright Agency to enable the copying of resources (AUD \$30.7 M in 2014-15¹⁵).
- The journal publisher receives a royalty payment from the Copyright Agency based on the results of their annual surveys.
- In general, the author of the scholarly journal article receives no upfront remuneration from the publisher of the scholarly journal and no royalty remuneration from the Copyright Agency (unless they are a member).

This is an inefficient use of funds, and occurs due to bargaining power imbalances and inefficiencies in the administration of the current copyright system. The University considers that a combination of direct licensing and voluntary licences, in combination with a balanced fair use/fair dealing exception that includes appropriate provisions for research and education would help to address the above imbalances.

Are there ways (including examples employed overseas) to improve the dissemination of IP while preserving incentives to generate IP? Could such methods be adopted or adapted within the Australian IP system?

In the US, for example, a broad “fair use” rather than “fair dealing” exemption to copyright infringement is used. In addition to streamlining the use of resources in traditional classrooms, fair use may be relied on to allow third-party materials to be made available online, in “flipped” online classrooms and even in open education environments, if the use can be considered “fair”.

The University considers the US method could be adopted in the Australian copyright system and supports the position put forward by The Australian Law Reform Commission (ALRC) in its 2014 report *Copyright and the Digital Economy* whereby it recommended to the Australian Government that the Copyright Act should provide an exception for fair use (see recommendation 4-1).¹⁶

How well has Australia’s IP system adapted to changes in the economic, commercial and technological environment and how well placed is it to adapt to such changes in the future? What factors may make it harder for the IP system to adapt to change? What policy options are there to remedy any difficulties, and why might they be preferable?

The copyright system in Australia has not adapted well to changes in the economic, commercial and technological environment and is not well placed to adapt to such changes in the future. An example of this is the way the current Technological Protection Measure (TPM) provisions prevent our educators from relying on existing provisions in online classroom environments. The lack of a broad right for educational institutions to circumvent TPMs limits our teacher’s ability to engage in innovative course design and delivery, placing Australia’s education sector at a competitive disadvantage in relation to other jurisdictions.

The University of Sydney deploys audio-visual recording equipment in all major teaching spaces, in order to support our flexible learning practices and to meet student demand for on-line access to lectures. The system we use enables teachers to record his/her lecture and make that recording available to enrolled students at a time and a location that is convenient for the student. However, this process of lecture

¹⁵ Copyright Agency. (2015). COPYRIGHT AGENCY ANNUAL REPORT 2014–15. Retrieved from <http://copyright.com.au/wp-content/uploads/2015/04/2015-Annual-Report-A4-2.pdf>

¹⁶ Australian Law Reform Commission. (2014). Copyright and the Digital Economy (ALRC Report 122). <http://www.alrc.gov.au/publications/copyright-report-122>

recording means a copy will be made of all materials shown and performed during class including all audio and visual material presented by the teacher. The recorded lectures are then available to be streamed to students through the system's Player via the University's Learning Management System (a system that may only be accessed by enrolled students and University staff).

In principle, managing copyrights in these circumstances is straightforward *except* where TPMs exist (eg a DVD from the University Library collection, or a YouTube Video). If the recording of these materials would otherwise be a permitted act under the Part VA or s 200AB provisions of the Copyright Act, but is not a permitted act under the TPM provision, then the University will not be able to rely on the statutory licence or exception and would inadvertently breach the Copyright Act unless steps are taken.

Where academics wish to use TPM protected materials in a recorded lecture the options available to them are labour intensive and/or disruptive including:

- omit or replace the material - this is not ideal if we assume the material has been selected for a specific pedagogical purpose; or
- pause the lecture recording to avoid recording the affected material - this is onerous and disruptive for the teacher, and further adversely affects those students who stream the lecture at a later stage as key learning resources will have been omitted from the recording; or
- opt out of lecture capture altogether - resulting in loss of flexible learning options and disadvantage those students who were unable to attend class or are undertaking distance learning; or
- get permission from the copyright owner to record and stream the affected material – this is very time consuming, and not a practical option for weekly lectures.

Since we introduced lecture capture technology the number of questions raised by staff regarding use of audio-visual materials has risen sharply. Many have voiced their concern that TPMs have a negative impact on innovation and educational best practice when they prevent the use of audio-visual resources in blended classroom teaching. Other have noted that they had no practical way to teach their subjects (for example, media studies) in a blended classroom environment without including examples of audio-visual works.

Difficulties in adapting to technological change also exist in overseas markets such as the US, but they are balanced by public policy decisions to maximise public access to copyright materials for education purposes. A very recent policy decision in the US has introduced a new exemption to the *Digital Millennium Copyright Act 1998* (DCMA) that allows the copying of "digitally locked" video content in online classroom environments¹⁷. On 28 October 2015, the exemption was approved by the US Copyright Office.¹⁸ This exemption will have widespread impact across the education sector in the US as the exemption allows open, for-profit online learning platforms to use copyrighted material alongside traditional not for profit schools and higher education providers. This provision complements existing provisions within the DCMA which allow professors to use copyright video resources for in-class lectures.

At present, no similar exemption is available to Australian academics experimenting with flipped classrooms, lecture capture/streaming, MOOCs and Open Education Resources (OER). In addition to the lack of a broad fair use provision for education and research, the current TPM provisions place Australian

¹⁷ Leong, J. (2015). Cinema studies prof obtains exemption to allow use of copyrighted movie clips in MOOCs. Retrieved from <http://www.upenn.edu/pennnews/current/2015-11-05/latest-news/cinema-studies-prof-obtains-exemption-allow-use-copyrighted-movie-clips-moocs>

¹⁸ Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies. Retrieved from <http://www.gpo.gov/fdsys/pkg/FR-2015-10-28/html/2015-27212.htm>

education providers at a competitive disadvantage to comparable education providers in other jurisdictions.

To be efficient and effective in the modern era, what (if any) changes should be made to Australia's copyright regime?

1) Fair use

The University supports the proposal put forward by Universities Australia to the *Australian Law Review Commission's discussion paper on Copyright and the Digital Economy* to introduce fair use and repeal the education statutory licences of the Copyright Act 1968 (Cth) (the Act), replacing these with a broad and flexible fair use exemption. If enacted, the University believes these amendments will provide an efficient, flexible and "fair" copyright framework that promotes innovation in the higher education and research sectors and in Australia more generally.

For example, if fair use is enacted, we would rely on it to make and communicate allowable quantities of copyright protected material for its own use (i.e. preparation of course materials and research) and to make copies and communicate these materials to persons for educational and research purposes. We therefore strongly support the ALRC's proposed shift away from the current position under the Copyright Act that considers "who is doing the copying" to the fundamental question of whether or not the copying is "fair".

Schedule 1 below sets out 90 provisions within the Copyright Act that relate to education, research and the operation of libraries and archives. Many of these provisions could be repealed with the introduction of fair use creating a more effective, efficient and easily understood exemption as compared with the complex arrangements that exist today. The ALRC recommends that 'research', 'education', 'library and archive use' and 'assisting people with a disability' be included in a non-exhaustive list of illustrative purposes of the recommended fair use exception.¹⁹

2) Contracting Out

If contracts are permitted to over-ride statutory exceptions (as is currently the case) this will erode the benefits gains from such a flexible exception. To ensure that "fair use" and/or "fair dealing" operates in the manner in which it is intended we recommend that all voluntary licences are negotiated or entered into in the context of what is "fair" ie: no restrictions placed on fair use/fair dealing.

Is licensing copyright-protected works too difficult and/or costly? What role can/do copyright collecting agencies play in reducing transaction costs? How effective are new approaches, such as the United Kingdom's Copyright Hub in enabling value realisation to copyright holders?

1) Copyright collection agencies are inefficient and costly

In our assessment, copyright collection agencies are inefficient and costly. In addition to paying multiple times for scholarly works as noted above, inefficient and ineffective methods of sampling mean that the education sector also pays for freely and openly accessible material. We therefore share the concerns expressed by Universities Australia:

¹⁹ Australian Law Reform Commission. (2014). Copyright and the Digital Economy (ALRC Report 122). <http://www.alrc.gov.au/publications/copyright-report-122>

“Some of the content that universities currently pay for under the statutory licences, and which is likely to fall within a fair use exception, includes freely available internet content, (including content uploaded onto blogs and freely available wikis that no one ever expected to be paid for) and orphan works. Currently, the money paid by universities for this content is eventually paid to Copyright Agency members who have no connection to the works that were copied. That is because Copyright Agency has no one else to distribute it to. In other words, these members benefit from a windfall payment - at the expense of publicly funded education institutions - due to the inefficiencies of the statutory licence.”²⁰

We recommend that voluntary licenses such as the Music Licence, in combination with fair use or a more flexible fair dealing exception would be more cost effective and efficient than the current statutory licenses for Educational Institutions set out in the Copyright Act.

Are copyright exemptions sufficiently clear to give users certainty about whether they are likely to infringe the rights of creators? Does the degree of certainty vary for businesses relative to individual users?

Copyright exemptions lack clarity in the context of current activities in research and education including data mining and orphan works.

1) Data Mining

There is no exception in the Copyright Act that adequately addresses non-consumptive uses of material such as text, data or content mining. As a signatory to the *Hague Declaration on Knowledge Discovery in the Digital Age*, the University supports the lawful use of accessible data, and the development of novel research methodologies.

In many cases, it is possible to obtain upfront permission to conduct data mining activities – for example, if a University of Sydney student text mines a stand-alone journal database, permission may be covered in the terms and conditions of the University’s subscription to the database. However, in other instances, publicly accessible content may be obtained from hundreds (or even thousands) of distributed sources, and or orphan sources, making it impossible for the researcher to clear copyright as the rights holder cannot be identified or located.

In the UK, recent changes to copyright law allows text and data-mining of copyright material for non-commercial research purposes, without having to obtain specific permission from the rights holder.²¹ The University considers in such circumstances where individual permission to mine distributed, publicly available data is either difficult or impossible to obtain, data and content mining for non-commercial purposes could be considered “fair”. The lack of an exception to enable data and text mining for non-commercial, research and education purposes places Australian research institutions at a competitive disadvantage when compared to other jurisdictions.

²⁰ Universities Australia “*Submission in response to the Australian Law Reform Commission discussion paper on Copyright and the Digital Economy – July 2013*”. Retrieved from

<https://www.universitiesaustralia.edu.au/search.aspx?ModuleID=2550&keywords=copyright&multiSite=False>

²¹ Intellectual Property Office (UK). (2014). *Exceptions to Copyright: An Overview*. From <https://www.gov.uk/government/publications/changes-to-copyright-law>

2) Orphan Works

Like most universities, we have substantial holdings of unpublished materials (and indeed, unpublished orphan works) in our rare books and special collections. Under the Copyright Act, the copyright in these works will never expire unless the works are published in accordance with the provisions of the Copyright Act. Perpetual copyright means that some of these unpublished works will not be publicly available online unless the copyright owner is located and, where necessary, permission is granted by the owner to allow the University to copy and communicate the work to the public.

Our library has an on-going digitisation program that relies on existing provisions in the Copyright Act to digitise works for archival purposes. Once digitised, unless the copyright has expired or there is a licence from the copyright owner, the digitised version is only available for inspection by library staff. Ideally, the University would like to make more of its digitised rare books and special collections openly accessible to library users and members of the public.

For example, the University of Sydney Library plans to undertake digitisation of the complete collection of Honi Soit, the free weekly student newspaper published by the University's Student Representative Council since 1929. Honi Soit is a significant and popular source of primary information for researchers and members of the public with an interest in Australian political and public figures. During its long history, many notable authors have contributed articles to Honi Soit while other authors have chosen to remain anonymous. Past contributors include Prime Minister Malcolm Turnbull, writer and feminist Germaine Greer, journalist Robert "Bob" Ellis, media personality Clive James, author Madeline St John, art critic Robert Hughes and High Court Judge Michael Kirby.

Despite the popularity and significance of the Honi Soit collection, the digitisation program was delayed multiple times due to legal uncertainties around providing access to anonymous (orphan) articles and unpublished supplementary material such as notes, manuscripts and sketches.

3) Flexible dealing exception—s200AB

The flexible dealing exception in s200AB of the Copyright Act is an example of an exception that is confusing in its application, and is not sufficiently clear to give users certainty about the scope of the provision and whether they are likely to infringe the rights of creators when relying on the provision. The provision is particularly unusual in that it incorporates the three-step test used in international copyright law and, in particular, Article 13 of the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement). This is unusual because the test is normally used by governments to assess proposed copyright **exceptions** under their domestic copyright laws. However, under the flexible dealing exception, users are required to apply the test to a proposed **use** under a domestic law exception.

This uncertainty is compounded by the fact that there is little consensus internationally on how to apply the three-step test. As far as the University is aware, there is only one international adjudicative decision concerning the test in the context of the TRIPS Agreement. We are not aware of any judicial consideration of the test under s200AB.

For the purposes of the flexible dealing exception, the three-step test requires that the use of the copyright material must:

- amount to a special case;
- not conflict with the normal exploitation of the copyright material; and
- not unreasonably prejudice the legitimate interests of the owner of copyright.

In addition to applying the three-step test, a library wanting to rely on the flexible dealing exception must satisfy the following preliminary criteria in relation to the use:

- it must be made for the purpose of maintaining or operating the library (including operating the library to provide services of a kind usually provided by a library);
- must not be made partly for the purpose of obtaining a commercial advantage or profit; and
- there must not be any other exception or a statutory licence in the Copyright Act that provides the use is not an infringement of copyright.

Due to the uncertainty in interpreting these criteria, we have found it difficult and incredibly time consuming to apply the criteria to a particular proposed use. For example, there are numerous exceptions in the Copyright Act in relation to particular uses of copyright material by a library. To consider whether any of these exceptions or a statutory licence applies to the use before the library can rely on the s200AB exception is an incredibly time-consuming process and, as a consequence, has a chilling effect on relying on the provision and pursuing the proposed use.

In our view, the provision is unnecessarily complex and has not fulfilled the goals of:

- allowing copyright material to be used for socially beneficial purposes; and
- introducing an exception that would operate like a US style fair use exception that could provide more flexibility than is available under the existing specific exceptions and statutory licences.²²

Additional Issues for discussion:

The Commission has indicated that submissions need not be limited to the matters explicitly raised in the Issues Paper. In order to provide a complete overview of the key intellectual property issues faced by universities in respect of research and innovation, we suggest the following supplementary comments be submitted for consideration.

1) Joint intellectual property ownership between universities and public health organisations

The following is extract from a NSW Ministry of Health Policy Directive:

*"Significant issues arise in relation to intellectual property created by clinical academics, who work in both the University sector and the public hospital sector.... Similar issues arise in relation to joint teaching hospital/University facilities, where health research may be undertaken jointly by a mixture of university and hospital staff."*²³

The policy goes on to state that these issues should be dealt with expeditiously and as early as possible in the identification/protection/commercialisation process. However, in practice this rarely occurs and substantial delays can arise. We invest considerable time and effort to resolve these issues, diverting our limited resources away from active and constructive commercialisation activities and delaying registration of IP protection.

The public hospital sector organisations play a vital role in partnering with universities for clinical research and development activities. Often though, such organisations do not have the resources or expertise to effectively carry out commercialisation and engage in discussions regarding IP protection.

²² Explanatory Memorandum, *Copyright Amendment Bill 2006*, p 10. Retrieved from http://parlinfo.aph.gov.au/parlInfo/download/legislation/ems/r2640_ems_2b1ade71-ecd4-477f-9b4f-f49198251a33/upload_pdf/305911.pdf;fileType=application%2Fpdf

²³ NSW Health Policy Directive – *"Intellectual Property Arising from Health Research – Policy – NSW Department of Health"*. Retrieved from http://www0.health.nsw.gov.au/policies/PD/2005/pdf/PD2005_370.pdf

We recommend that these issues may be overcome by a state government policy directive that enables universities to have exclusive rights to register such jointly owned intellectual property and undertake commercialisation, provided that equitable arrangements are in place with the public health organisation for the sharing of any revenues that are generated.

2) Employer entitlements to own inventions created by employees – post *University of Western Australia v Gray*

In its 2009 submission to IP Australia, “*Getting the Balance Right and Exemptions to Patent Infringement*” the Go8 expressed its concern that research outcomes such as patents are not adequately protected under the contracts for employment of research staff. The Go8 proposed that the Patents Act be amended to introduce an equivalent section 35(6) of the Copyright Act that expressly states that ownership of patents vest with the employer. In our view this kind of reform would clarify the uncertainty that exists in Australia following the decision made in the *University of Western Australia v Gray*²⁴ in so far as it relates to our claims of ownership of patentable inventions that are created by our staff during the course of their employment as expressed in the *University of Sydney (Intellectual Property) Rule 2002 as amended* and its draft *Intellectual Property Policy 2015*.

²⁴ *University of Western Australia v Gray* ([2009] FCAFC 116 (3 September 2009),

Schedule 1

GENERAL	
28	Performance and communication of works or other subject-matter in the course of educational instruction
40	Fair dealing for purpose of research or study
41	Fair dealing for purpose of criticism or review
41 A	Fair dealing for purpose of parody or satire
44	Inclusion of works in collections for use by places of education
49	Reproducing and communicating works by libraries and archives for users
50	Reproducing and communicating works by libraries or archives for other libraries or archives
51	Reproducing and communicating unpublished works in libraries or archives
51A	Reproducing and communicating works for preservation and other purposes
51B	Making preservation copies of significant works in key cultural institutions' collection
52	Publication of unpublished works kept in libraries or archives
103 A	Fair dealing for purpose of criticism or review
103AA.	Fair dealing for purpose of parody or satire
103C.	Fair dealing for purpose of research or study
110A.	Copying and communicating unpublished sound recordings and cinematograph films in libraries or archives
110B.	Copying and communicating sound recordings and cinematograph films for preservation and other purposes
110BA.	Making preservation copies of significant recordings and films in key cultural institutions' collections
112AA	Making preservation copies of significant published editions in key cultural institutions' collections
PART VA	
135A	Interpretation
135B	Copies and communications of broadcasts
135C.	Extended operation of this Part
135D.	Operation of collecting society rules
135E.	Copying and communication of broadcasts by educational institutions etc.
135F.	Making and communication of preview copies
135G.	Remuneration notices
135H.	Records notices
135J.	Sampling notices
135JAA.	Determination of questions relating to this Division or the collecting society's rules
135JA.	Agreed notice
135K.	Marking and record keeping requirements
135KA.	Notice requirements in respect of communications



135L.	Inspection of records etc.
135M.	Revocation of remuneration notice
135N.	Request for payment of equitable remuneration
135P.	Declaration of the collecting society
135Q.	Revocation of declaration
135R.	Annual report and accounts
135S.	Amendment of rules
135SA.	Applying to Tribunal for review of distribution arrangement
135T.	Appointment of notice holder
135U.	Copying before declaration of collecting society
135V.	Preview copies
135W.	Notices by administering bodies
135X.	Marking and record keeping requirements
135Y.	Effect of declaration of collecting society
135Z.	Relevant right holder may authorise copying etc.
135ZA.	Copyright not to vest in copier
PART VB	
135ZB.	Interpretation
135ZC.	Eligible items and photographic versions
135ZE.	Part does not apply to computer programs
135ZF.	Operation of collecting society rules
135ZFA.	Licensed communications
135ZGA.	Application of Division
135ZG.	Multiple reproduction of insubstantial parts of works that are in hardcopy form
135ZH.	Copying of printed published editions by educational institutions
135ZJ.	Multiple reproduction of printed periodical articles by educational institutions
135ZK.	Multiple reproduction of works published in printed anthologies
135ZL.	Multiple reproduction of works that are in hardcopy form by educational institutions
135ZM.	Application of Division to certain illustrations that are in hardcopy form
135ZMA.	Application of Division
135ZMB.	Multiple reproduction and communication of insubstantial parts of works that are in electronic form
135ZMC.	Multiple reproduction and communication of periodical articles that are in electronic form by education institutions
135ZMD.	Multiple reproduction and communication of works that are in electronic form by educational institutions
135ZMDA.	Reproduction and communication of works from electronic anthologies by educational institutions
135ZME.	Application of Division to certain illustrations in electronic form
135ZN.	Copying published editions by institutions assisting persons with a print disability

135ZP.	Multiple reproduction and communication of works by institutions assisting persons with a print disability
135ZQ.	Making of relevant reproductions and relevant communications by institutions assisting persons with a print disability
135ZR.	Copying of published editions by institutions assisting persons with an intellectual disability
135ZS.	Copying and communication of eligible items by institutions assisting persons with an intellectual disability
135ZT.	Making of copies etc. for use in making copies or communications for a person with an intellectual disability
135ZU.	Remuneration notices
135ZV.	Records notices
135ZW.	Sampling notices
135ZWAA.	Determination of questions relating to this Part or a collecting society's rules
135ZWA.	Electronic use notices
135ZX.	Records notices and sampling notices: marking and record-keeping requirements
135ZXA.	Electronic use notices: notice requirements etc.
135ZY.	Inspection of records etc.
135ZZ.	Revocation of remuneration notice
135ZZA.	Request for payment of equitable remuneration
135ZZB.	Collecting societies
135ZZC.	Revocation of declaration
135ZZD.	Annual report and accounts
135ZZE.	Amendment of rules
135ZZEA.	Applying to Tribunal for review of distribution arrangement
135ZZF.	Rights of copyright owners
135ZZG.	Copyright not to vest in copier
135ZZH.	Unauthorised use of copies
FLEXIBLE DEALING	
200 AB	Use of works and other subject-matter for certain purposes

Figure 1. Australian copyright provisions relating to education, research, education and libraries and archives.