# THE (UNEASY AND SOMEWHAT MESSY) INTERACTION OF THE IP LAWS AND THE COMPETITION LAWS

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The views expressed in this paper are those of the author writing in a personal capacity.

**Introduction**

Intellectual property rights ("**IPRs**"), Professor Cornish reminds us, "are essentially negative: they are rights to stop others doing certain things"[1] – those things being primarily the use of the ideas (or more properly, the output of creative endeavour, which may be the expression or material embodiment of an idea, rather than the idea itself) covered in the grant made to right-owner. As rights to exclude, IPRs sit uneasily with the conventional notion of competition, which centres on the ability of several, possibly many, parties to act as rivals in striving for economic rewards. The uneasy nature of the relationship should not suggest that there is contradiction between IPR's and competition: rather, it is a truism that IPRs, by allowing creators to secure a greater share of the social gain from their creation than they would otherwise, can promote investment in creative effort; and that it is this investment that underpins the development of new processes and products which not only contributes directly to increased wellbeing but also, in Schumpeter's famous phrase, is a form of competition "as much more effective than [conventional price competition] as a bombardment is in comparison with forcing a door".[2]

This is clearly a gain to society; but it is bought at a cost. Once made, ideas are relatively readily transmitted and used; they are, in economic terms, non-rivalrous.[3] From an economic point of view, therefore, they ought to be used as widely as possible – which implies a price of or close to zero (for the idea itself, though not for its material form). The exclusionary right granted by the IPR, however, enables the right-owner to set a positive price for the protected material, thereby reducing the flow of and output from ideas. To the extent to which ideas themselves serve as the basis for generating further ideas, the social cost of the reduced flow can take the form not only of less income today but also of less growth in income in periods to come. If owners of IPRs could use their exclusionary rights to extend their control even further than the original grant contemplated, securing an income stream in excess of the social gain arising from their creation, the costs to society could be greater yet.

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1 Cornish (3rd ed, 1996) Intellectual Property 6.

2 Schumpeter (1944) Capitalism, Socialism and Democracy84.

3 This simply means that one person can consume more of an idea without reducing the stock of that idea that is available for others to consume. This does not require that the costs of transmitting information and even less so technology are zero; this is plainly not the case (otherwise lawyers could not earn as much as they do for mediating the public's access to information that is in the public domain). However, the presumption remains that the costs involved in transfer are low relative to those of first creation. Indeed, a central rationale for IPR's is that in the absence of rights to exclude, third parties could readily and relatively low cost benefit from the creative effort of others.

That there is consequently a balancing to be sought is nothing new. Arguments that "public utility requires that production of the mind should be diffused as widely as possible"[4] were common in the English literary property debate of the 18th century; so too was the hostility to patents embodied in Blackstone's view that "mechanical inventions tend to the improvement of arts and manufactures, which employ the bulk of people; therefore they ought to be cheap and numerous".[5] Although copyright eventually gained widespread acceptance, criticism of the "monopoly" granted by patents has periodically resurfaced, with even the intellectual grand-father of Chicago economics, Frank Knight, viewing them as an "exceedingly crude way of rewarding invention".[6] From this he concluded that "it would seem to be a matter of political intelligence and administrative capability to replace artificial monopoly with some **direct** method of stimulating and rewarding research"[7] – a view the Nobel laureate in economics, Kenneth Arrow, echoed, some 40 years later, in his classic article of the economics of R&D.[8]

These arguments, compelling though they may be in the abstract, rest on the assumption that governments, in implementing Knights' "direct method" of stimulation, will make fewer or less costly errors in allocating resources to creative effort than are caused by the market-oriented mechanism of IPR's. This assumption has merit when applied to pure research, but must surely fail at the more applied end of the spectrum. To begin with, it requires a greater degree of omniscience (and perhaps of omni-benevolence) from public decision-makers than it is safe to assume. Additionally, it underestimates the incentives even owners of monopoly rights have to expand output, say through price discrimination, and hence likely over-states the costs of the alleged monopoly. Finally, it wrongly assumes that IPR's serve only to fund investment in creative effort; in practice, they also act to promote the disclosure of new ideas (particularly in areas where secrecy is a viable alternative) and – by allowing well-defined rights to be traded – to facilitate the allocation of the ownership of creative works to those who can put them to their most highly valued use. As no "direct method" of stimulation has yet been found that even comes close to matching these effects, calls for a wholesale retreat from IPR's are not likely to command much support.

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4 The Cases of Appellants and Respondents in the Cause of Literary Property Before the House of Lords (1774) 6, cited in Sherman and Bently (1999) The Making of Modern Intellectual Property Law 29.

5 W. Blackstone [as Counsel] Tonson v Collins (1760) 96 ER 189.

6 Knight (8th impression, 1957) Risk, Uncertainty and Profit 372. Knight believed that most of the rewards from patents went to those who put the "finishing touch" on ideas, rather than the genuine risk-takers.

7 Ibid, 372.

8 Although often cited by those who support strong IPR's, suggesting that as with so much economic literature, it is far more often cited than read, Arrow's main conclusion is that "for optimal allocation [of resources] to invention it would be necessary for the government or some other agency not governed by profit-and-loss criteria to finance research and invention." Arrow (1962) "Economic welfare and the allocation of resources to invention" in The Rate and Direction of Inventive Activity: Economic and Social Factors 623.

What can and should command support is the continued investigation of whether the right balance has been struck between vesting ownership rights in creators and promoting the widest use of the results of creative effort. Faced with changes in technology, and more generally in the economic and regulatory environment in which investment in creative effort occurs, the balance that has been struck, and the particular mechanisms that give it effect, need to be open to re-examination.

In reviewing this balance, it is important to note that it is effected at two levels: first, in the conditions attached to the grant of an IPR, and in privileges and obligations the legislation directly governing that right[9] vests in the right-owner; and second, in the constraints on the exercise of that right that may be imposed by other legislation – with the *Trade Practices Act 1974 (Cth)* ("**TPA**") being most directly relevant.[10] In practice, it is the two together that define the bundle of rights available to those who invest in creative effort; and concerns about promoting the widest use of knowledge, and enhancing competition both in its production and in its exploitation, have been reflected in both of these layers. Indeed, a difficult issue, and one which has commanded surprisingly little attention, is that of the appropriate division of tasks as between these levels.[11]

The approach taken here will consequently be to first, examine some of the issues that currently arise in respect of the balance struck within two of the main statutory instruments that define IP rights (the copyright and patent statutes respectively); then consider aspects of the treatment of those rights under the TPA; and finally, to examine some of the open questions that arise from the interaction between these.

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9 Specifically relevant are the *Copyright Act 1990* ("**CA**"); the *Designs Act 1906*; the *Patents Act 1990* **("PA")**; the *Trade Marks Act 1995*; the *Circuit Layouts Act 1989*; and the *Plant Breeder's Rights Act 1994*.

10 This formulation is not intended to uncritically accept the distinction drawn in EU case law, since *Costen and Grundig v. Commission* [(56 and 58/64) [1966] E. C. R. 299], as between the *existence* and *exercise* of IP rights – the one being protected from other community laws, the other not. As Korah notes, "in legal theory, it is impossible to draw the line between existence and exercise, except at the extremes. Analytically, the existence of a right consists of all the ways it may be exercised. In ruling that an important difference rests on a distinction which cannot be drawn by logical analysis, the Court created a very flexible instrument for it to develop the law and reduce the value of intellectual property rights". Korah (5th ed., 1994) An Introductory Guide to EC Competition Law and Practice 190. Having said that, it is neither unreasonable nor illogical to distinguish between the grant of a right and the conditions of its exercise. Each of these may involve a balancing of competition and other considerations.

11 Gallini and Trebilcock (1999) "Intellectual Property Rights and Competition Policy: A Framework for the Analysis of Legal and Economic Issues", consider this issue, but merely so as to say that competition policy should start from the premise that the IPR's embody a reasoned social choice as to the extent of the claim that investors in creator effort can have on the social income resulting from that effort. While a difficult concept to implement, this seems reasonable, and is no more than was argued by Bowman Jr. (1973) Patent and Antitrust Law: A Legal and Economic Appraisal; however, Gallini and Trebilcock do not consider what factors should determine whether the restrictions on that claim should be embodied in the IP system or conversely, in the competition policy system.

The overall hypothesis being advanced is a simple one: that in Australia, considerations as to the appropriate balance to be struck in the definition and enforcement of IP rights have mainly been given effect by embodying specific provisions, aimed at achieving that balance, in the IP system; the bundle of rights thus defined has then been given a relatively wide-ranging, though ambiguous and poorly worded, exemption from the more general statutes aimed at protecting and promoting competition. Although this architecture is not *per se* inefficient, its implementation lacks consistency and has resulted in rules that are at times seriously under- or over-inclusive. There is consequently an at least *prima facie* case for its reconsideration.

**Copyright**

Copyright is often described as an ownership right that is easily acquired and durable but extremely narrow – easily acquired, because of the absence of registration requirements and because the threshold of creativity required to attract protection is low; durable, because the right persists for far longer than other IPRs; but narrow, because of the limited scope of protection the right offers. [12] The rise of new technologies, which convert an ever-greater part of the stock of copyrightable material into digital form, along with the emergence of copyright as the prime form of protection of software in all of its many manifestations, have brought ever greater pressures to bear on this most flexible of rights.

To understand the form these pressures take, it is important to note a distinctive feature of the Australian copyright regime. In the US, the desirability of providing scope for limiting the reach of the right-owner's power to exclude is reflected in relatively general provisions relating to "fair use". These are set out in s.107 of the *Copyright Act* (Title 17 of the United States Code), which exemplifies instances of fair use (by referring to "purposes ***such as*** criticism, comment, news reporting, teaching, .. scholarship, or research" (emphasis added)) and then lists factors which must be taken into account (though others may also be considered) in determining whether a particular use falls within the provision.[13] A specific provision then allows libraries to provide copies to users, upon request, within limits set out essentially in qualitative terms.[14] A similar though not identical approach is adopted in the UK.[15]

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12 Besen and Kirby (1989) "Private copying, appropriability and optimal copying royalties" 32 Journal of Law & Economics 255.

13 See generally Merges, Menell and Lemley (2000) Intellectual Property in the New Digital Age 490 – 543.

14 For example, by referring to whether, when the purpose of the copying is replacement, "an unused replacement cannot be obtained at a reasonable price" (s.108(d)(1)), or whether the effect of any inter-library loan scheme in which the library operates makes available "such aggregate quantities as to substitute for a subscription to or purchase of such work" (s.108(g)(2)). See also, on the economics involved in the application of this provision to libraries, Kingma (1996) The Economics of Access versus Ownership.

15 Section 29 of the *Copyright, Designs and Patent Act 1988* provides a general fair dealing exception for research and private study while ss.37-43 provide exceptions for libraries and archives. As Cornish notes, these provisions embody a "relatively light legislative hand .. [so that] it remains for the Courts to decide how far business, and for that matter government, should be able to take single copies without licence by claiming to need them for these purposes": Cornish (3rd ed, 1996) Intellectual Property 436.

The Australian approach is more prescriptive. The purposes encompassed by the fair dealing provisions are set out exhaustively, mainly in ss40-43 **CA**,[16] rather than by example. Additionally, the deeming provision of s40(3), together with the inclusive definition of a "reasonable portion" in s10(2), creates a "safe harbour" from the operation of the factors identified in s40(2).[17] The relations between rights-owners and users are then further regulated by the statutory licensing requirements imposed upon rights-owners, along with the jurisdiction vested in the Copyright Tribunal to fix royalties or equitable remuneration in respect of compulsory licenses and to arbitrate disputes in relation to the terms of the licenses or of proposed licensing schemes.[18]

The Copyright Law Review Committee, in its first report on its Simplification reference, has recently recommended a move to a less prescriptive approach to fair dealing.[19] In considering this recommendation, it is important to consider the rationale underpinning the current arrangements. In essence, these arrangements serve to reduce the transactions costs that could arise were the relevant provisions less clearly specified. By their nature, ownership of the relevant rights is dispersed; so too is use of the works in which the rights are embodied. At the cost of some arbitrariness, the provisions reduce the uncertainty that bears on the process of determining the scope of the right, be it through contracting, litigation or both, and hence likely make for greater use than would otherwise occur.[20] The presumptive rights granted to educational institutions and to libraries are also an important way of recognising the externalities associated with these points of access to the various forms of copyrighted material. Moves away from the current scheme, towards one that is more open-ended, therefore need to be viewed with caution.

Having said that, the Australian approach has imposed some costs in terms of the ability of the copyright system to adapt to change. It is especially in the software area that the consequences for competition of a degree of inflexibility in the system have been apparent. The central element of contention in this respect is the permissible scope of various forms of "reverse engineering". Some economic background is needed to make sense of the relevant debate.

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16 Related provisions, of varying importance, are discussed in McKeough and Stewart (2nd ed, 1997) Intellectual Property in Australia 210 and follows.

17 The factors set out in s40(2) **CA** are not exhaustive, and in that sense, a court could look more widely in adjudicating a dispute that involved the copying of more than a "reasonable portion" of a work. However, the purposes for which the copying may occur are prescribed, and it is in that sense that the Australian provisions are narrower than their counterparts in (say) the United States.

18 See generally, McKeogh and Stewart (2nd ed, 1997) Intellectual Property in Australia 182 and follows.

19 Copyright Law Review Committee (1998) Simplification of the *Copyright Act 1968* Part 1: Exceptions to the Exclusive Rights of Copyright Owners.

20 This line of argument, drawn by analogy to shifting between property and liability rules, extends back to Gordon (1982) "Fair Use as Market Failure" 82 Columbia Law Review 1600; a critique that is fundamentally unconvincing – especially in the light of the Australian experience -- can be found in Merges (1996) "Contracting into Liability Rules" 84 California Law Review 1293.

Competitive conditions in the supply of software are affected to a greater or lesser degree by what economists refer to as network effects.[21] A *network effect* exists when, other things equal, consumers would rather join a larger than a smaller network. The most direct way in which a network effect arises is when consumers obtain value as other users adopt the same service, or compatible ones. The classic example of a network effect is that telephone users benefit from being connected to the same network as others: there is little point having a telephone if one is unable to reach, or be reached, by others. Similarly, computer users value the fact that others use the same computer operating system (such as Windows) since this makes the sharing of files possible. As a result, consumers will, all other things equal, place a greater value on joining whichever network is larger – for example, choosing Windows over other competing programs because of the greater base of other users with whom Windows allows them to interact. One consequence of this is that where network effects are significant, and are appropriable by individual producers (for example, through ownership of intellectual property rights), competition can become "tippy", with a supplier gaining dominance not because of the inherent merit of its goods or services but because it attains a critical mass at which consumers – who would otherwise have purchased from a competitor – shift towards it in large numbers.[22] The resulting equilibrium can be difficult to shift if challengers to the dominant standard, so as to attract customers, need to compensate users for foregoing the network effects the incumbent product enjoys.[23]

When this set of circumstances holds, IP rights, by precluding competitors from offering users products compatible with those supplied by the incumbent, could impose significant efficiency costs. To begin with, the standard allocative efficiency loss will be greater than is conventionally the case, because the higher price the incumbent (sheltering under the protection of the IP right) can charge imposes welfare losses not only on marginal users but – through foregone network effects – on inframarginal consumers as well. Additionally, there may be dynamic efficiency losses as products that are superior on the merits may take longer to displace less meritorious products, if they can displace them at all. From these observations flows an argument, with obvious implications for copyright protection of software, that IP protection should be weaker for products in which network effects predominate.[24]

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21 A useful overview of this concept, setting out its uses (and frequent abuses) is presented in Liebowitz and Margolis (1999) Winners, Losers and Microsoft: Competition and Antitrust in High Technology.

22 The concept of tipping was set out in Schelling (1978) Micromotives and Macrobehaviour and its consequences for collective action are well explained in Elster (1989) Nuts and Bolts for the Social Sciences 101 and follows. It has recently become fashionable, with consequences best gauged by looking at Shapiro and Varian (1999) Information Rules.

23 See for example Owen and Wildman (1992) Video Economics 260 and follows.

24 See Farrell (1995) "Arguments for weaker intellectual property protection in network industries" 3 Standard View 46, and more generally Church and Ware (1999) Network Industries, Intellectual Property Rights and Competition Policy.

In the United States, these considerations have been reflected in the courts' interpretation of the permissible scope of copyright protection. Both the merger doctrine, which restricts the protection accorded to copyright work in which the idea and the expression have merged, and more importantly the fair use provisions have been interpreted[25] as protecting various forms of reverse engineering when these are used to provide inter-operability and even when the purpose of the reverse engineering is to allow one supplier to substitute for the products of another.[26]

The more limited nature of the Australian fair dealing provisions, and the lower standard of creativity required to attract copyright, have largely ruled out this approach in Australia. The resulting tensions between the copyright provisions and the protection of competition have been addressed by specific amendments to the copyright laws that allow decompilation of computer programs for the purpose of securing inter-operability.

It is too early to judge the effects or effectiveness of s47D of the amended **CA**. There remains, at least at this time, some uncertainty as to the meaning of inter-operability, and the scope of the defence it creates.

Moreover, while the overall objective of the inter-operability provisions is a reasonable one, it clearly rests on competition concerns – that is, on the possibility that, at least in certain cases, competition in the supply of software can be materially harmed by the refusal of third party access to the code required to develop inter-operable products. However, the provisions, rather than embodying a competition test or threshold (such as those set out in s.44G(2) **TPA**), apply generally to the relevant class of copyrightable material. They thereby create a default entitlement. Whether such a default entitlement is economically efficient – when compared to a more case-by-case approach – is an issue that has not been subjected to careful analysis.

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25 In some cases, it must be said, through reasoning that seems very convoluted indeed, especially when heavy reliance is placed on the filtration tests for identifying protectable material: see for example *Computer Associates Int'l, Inc. v. Altai, Inc*., 982 F.2d 693 (2d Cir. 1992).

26 See notably and most recently *Sony v. Connectix*, unreported, US 9th Circuit Court of Appeals, no 99-15852, 10 February 2000.

**Patents**

As with copyright, the Australian patent system has reflected a mix of competition concerns, which it deals with at varying levels of generality and with varying degrees of success. Two areas (which are far from exhausting the field) are worth considering here: the scope of patentable subject matter; and the restrictions imposed on the exercise of a valid patent.

It has long been accepted that granting patents on "mere discoveries" would over-extend the scope of the patent right.[27] The costs of granting such patents in terms of restricted access to the raw material of technical progress could be high; the practical difficulties involved in defining and implementing the scope of such patents might impose additional transactions costs that exceeded the benefit resulting from the stimulus they would provide to discovery; and to these costs must also be added the social waste resulting from any "patent races" the availability of protection for discoveries would create.[28] Moreover, as this is the area where Knight's "direct method of stimulating and rewarding research" is most likely to be effective in coping with market failure, the case for relying on the patent system seems weak. The resulting exclusion of discoveries from the scope of patentability has been one of the factors cited at times as limiting the degree of monopoly the patent system entails.[29]

This long-standing exclusion has recently come under pressure as a result of several factors. Technological change, most notably in biotechnology but also in some areas of material science and of computing, is blurring the distinction between discoveries and inventions. At the same time, reductions in public interest research funding, and the search for greater market-testing even of public sector research outlays, are pushing an ever greater portion of research into the private domain. Pressures to grant intellectual property rights over forms of knowledge traditionally regarded as not capable of patenting have consequently increased.

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27 Patents are "granted for some production of these elements [the "first ground and rules for the arts and sciences, or in other words the elements and rudiments of them"] and not for the elements themselves (since) .. a principle cannot of itself, apart from a practical application, produce any vendible article or manufacture"; Buller J, *Boulton and Watt v Bull* (1795) ER 662.

28 See on this Posner (4th ed, 1992) Economic Analysis of Law 39. Historically, some weight attached to the argument that discoveries, unlike inventions, were more likely to be made in any event; and hence society would derive less benefit (as the effect would be mainly one of timing) from their promotion – see Sherman and Bently (1999) The Making of Modern Intellectual Property Law 44-47.

29 Sherman and Bently (1999) The Making of Modern Intellectual Property Law 46 at note 14.

In the EU, restrictions on the scope of patentability are embodied in Art. 52(2) of the *European Patent Convention 1973* which *inter alia* excludes from being regarded as inventions "mere discoveries of things already in nature; scientific theories; mathematical methods..".[30] A specific exclusion is also made in Canada by s.27(8) of the *Patent Act*, which states that "No patent shall be granted for any mere scientific principle or abstract theorem." In contrast, in the United States and Australia, the exclusion has been read into the relevant legislation by the Courts. In the United States, while the relatively open-ended nature of the statutory formulation[31] has resulted in considerable expansiveness in the scope of patentability, the inclusion in the patent examination process of a test of utility filters out applications which lack a specified use. In Australia, it is well established that mere discoveries are not proper patentable subject matter;[32] however, the lack of a substantial utility criterion in the examination stage, the presumption in favour of the applicant that is to be given in examination, and the uncertain meaning of the "artificially created state of affairs" test (that would at least potentially seem to encompass many mathematical algorithms[33]) creates a greater risk of undue extension of the scope of patentable subject matter. Given the relevant case law, this would seem to be capable of being dealt with by changes in the administration of the legislation, and most notably through the inclusion in the examination process of rules specifically aimed at establishing that a credible useful application had been identified. Such a change could better target the patent system to those areas where its benefits are most likely to exceed its costs.

Given greater clarity as to the conditions on which a valid patent can be obtained, the question then turns to the bundle of rights that holders of a patent can exercise. The Australian patent legislation imposes constraints on these rights, both through specific restrictions on practices such as tying,[34] and through the provisions allowing for compulsory licensing.[35]

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30 See also, for the provisions giving effect to these exclusions, the European Patent Office Patent Examination Guidelines at Articles 52(2) and 52(3).

31 35 U.S.C 101 "Inventions patentable" states "Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof may obtain a patent therefore, subject to the conditions and requirements of this title." However, it has been held that "A principle, in the abstract, is a fundamental truth; an original cause; a motive; these cannot be patented, as no one can claim in either of them an exclusive right." *Le Roy v. Tatham*, 55 U.S. 156, 175 (1852). See also USPTO Patent Examiners' Manual at s.2105: Patentable Subject Matter.

32 See for example *CCOM v Jiejing*, 28 IPR 481 at 511 and *IBM Corp v Commissioner of Patents*, 22 IPR 417 at 423.

33 A contrary view is expressed, but not fully explained, in the Australian Patent Examiners' Manual (revised December 1999) which states (at 8.2.7.4) that "a mathematical algorithm *per se* is neither an "artificially created state of affairs" nor is it something having "utility in the field of economic endeavour."

34 See s.144(1) of the **PA**.

35 See notably ss.133-135 of the **PA**.

It is apparent from the substance of these provisions that they are to be read as embodying a generic concern about competition and the possible abuse of any market power that obtains to a rights-owner. However, it is equally clear that the specific content of the provisions bears little or no relation to contemporary conceptions of competition policy. The close to *per se* prohibition on tying, for example, is inconsistent with many years of recognition of the efficiency-enhancing impacts tying can have.[36] An even greater gap between the statutory formulation and a concern with competition as a means to securing greater efficiency is apparent in the compulsory licensing provisions, which rather than embodying a test of competitive effect, speak of whether "an existing trade or industry in Australia, or the establishment of a new trade or industry in Australia is unfairly prejudiced" by a patent right.[37]

Whether these provisions have much practical effect is not known. While there is virtually no case law,[38] it has been said that Australian licensees benefit by bargaining in these provisions' shadow. Be that as it may, it seems reasonable to suppose that efficient outcomes would be advanced by repealing those provisions (such as s.144 **PA**) that seem obsolete and at least reforming those (notably ss.133-135 **PA**) whose formulation is inconsistent with accepted principles of the current competition law.

**The interaction with the TPA**

While competition concerns have been reflected (not always well) in substantive provisions in the IP statutes, the exercise of the rights granted by these statutes has enjoyed exemptions from the reach of the main competition statute, the **TPA**. The principal instrument granting an exemption is s.51(3) **TPA**, which exempts some aspects of the exercise of IP rights from Part IV of the **TPA**, with the exception of sections 46, 46A and 48. Additionally, s.44B **TPA** exempts "the use of intellectual property" from the operation of Part IIIA of the **TPA**, so long as that "use of intellectual property" is not "an integral but subsidiary part" of a service that is otherwise capable of declaration. Finally, s.152AL(6) **TPA** grants an exemption, more limited than that applying under Part IIIA, from declaration of a "use of intellectual property" under Part XIC **TPA**, with that exemption applying only if the intellectual property is not "an integral but subsidiary part" of a service **and** the service is not a listed carriage service but merely "a service that facilitates the supply of a listed carriage service" (defined at 152AL(1)(b) **TPA**).

There is controversy about the precise reach of these exemptions, and notably of those made under s.51(3) **TPA**. The wording of s.51(3), particularly the requirement that the conditions being protected from the **TPA** must "relate to" the variously defined subject matter of the right, lends itself to a number of conflicting interpretations.[39] However, what is uncontroversial is that these provisions provide an exemption which has no counterpart in either the EU or the US. This naturally raises the question of whether such exemptions can be justified.

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36 Bowman (1957) "Tying arrangements and the leverage problem" 67 Yale Law Rev. 19.

37 See s.135(1) **PA**.

38 See McKeogh and Stewart (2nd ed, 1997) Intellectual Property in Australia 320 and follows.

39 See generally Trade Practices Commission (1991) Application of the Trade Practices Act to Intellectual Property: Background Paper; Corones (2nd ed, 1999) Competition Law in Australia 299 and follows; and

From an analytical point of view, it may be assumed that in the absence of s.51(3)[40], the provisions of s.51(1) **TPA** would apply to the intellectual property statutes. As a result, any consideration of, for example, the competitive effects of conduct made in the exercise of an IP right (say, in terms of seeking to impose a particular condition in an IP license) would have to consider as its counter-factual a world in which the rights-owner could simply refuse to license, [41] and secure by its own means as large a share of the differential efficiency contributed by its creative effort as the IP right allows it to do. As a result, the exercise of IP rights would only lessen competition where it served to go beyond the scope of the right granted under the IP statute. If this is accepted, s.51(3) would seem to exempt too much, as the socially desired behaviour (the exercise of the rights within the confines of their grant) would in any event not breach the competition provisions of the **TPA**.

This line of argument abstracts however, from important features of the **TPA**. More specifically, the TPA contains a range of provisions which prohibit certain conduct independently of its assessed effect on competition and subject other conduct to administrative authorisation, again regardless of its effect of competition. It must be assumed that the logic underpinning these provisions is that the conduct at issue will, in the great majority of cases, be harmful, so that precluding or severely discouraging it will yield net social benefits.[42]

However much merit this argument may have at a general level, it seems open to some question in respect of IP rights. This is mainly because of the great importance that licenses and assignments have to the efficient use of intellectual property. Three factors are at work. The first is that the initial owners of IP rights are often not the parties best placed to exploit the output of their creative efforts. This is most plainly the case with specialised inventors, who remain responsible for some of the most important innovations in industrial use;[43] it also applies to small, research-intensive firms.[44] In these circumstances, licenses and assignments are needed to ensure that control over the rights is allocated to the parties that can exploit them most effectively.

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National Competition Council (1999) Review of Sections 51(2) and 51(3) of the Trade Practices Act 1974: Final Report.

40 And of the qualifier referring to intellectual property in s.51(1)(a) **TPA**.

41 This is consistent with the argument advanced by Corones (2nd ed, 1999) Competition Law in Australia 386 and follows to the effect that the refusal to license an IP right will not generally constitute a taking advantage of market power for the purposes of s.46 **TPA**. The necessary qualification is that analogous considerations have not prevented competition laws from being used to trump IP rights both in the EU (Korah (5th ed., 1994) An Introductory Guide to EC Competition Law and Practice 190 and follows) and in the United States (see Areeda and Hovenkamp (Revised ed., 1996) Antitrust Law: An Analysis of Antitrust Principles and their Application III, 150-204.

42 This judgement is reinforced by the scope provided under the **TPA** for parties to in most cases seek approval of that conduct where it yields social benefits that outweigh the conduct's competitive detriment. Given this scope, it can be assumed that the instances in which the conduct is most beneficial will be those in which the parties seek and receive authorisation. As a result, the prohibitions will deter the conduct that is most likely to be harmful, without impeding that which yields the greatest gains.

43 See Jewkes, Sawers and Stillerman (3rd ed, 1993) The Sources of Invention.

44 On the importance of which see for example, Mowery and Rosenberg (1998) Paths of Innovation: Technological Change in 20th-Century America 41 and follows. Interestingly, Mowery and Rosenberg

Second, in many if not most areas of technology, rights do not map simply into products. Commercial products will often embody technology covered by claims in tens or even hundreds of patents.[45] And the inter-dependence between rights is even greater in the innovation process itself, which frequently involves combining technological inputs owned by multiple rights-owners.[46] Complex webs of cross-licenses are required if these accumulated technical capabilities are to be put to productive use.

Third, even independent of the factors set out above, the costs of impeding efficient licensing can be high. As has been noted above, knowledge is non-rivalrous: increased access to it by one party does not reduce the stock available to others. As a result, when parties are forced to "invent around" existing knowledge, there is a risk that the resources consumed in the process will, in social terms, be largely wasted. Even when the result of "inventing around" is greater immediate competition, and hence a lower allocative efficiency loss, the benefits can readily be swamped by the productive inefficiency the duplication of outlays entails.[47]

Any assessment of repealing s.51(3) must therefore take account of the effect repeal would have on licensing and assignment decisions. More specifically, it seems reasonable to suppose that the *per se* prohibitions embodied in the **TPA**, and the potentially burdensome requirements for administrative review would catch many license conditions that are usually socially beneficial – for example, tying and exclusive dealing arrangements in patent licenses.[48] Over the longer term, this could both reduce innovation and distort competition as between those (typically smaller and more specialised) firms that depended on licenses and assignments and those which did not.[49]

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argue that small firms in the US innovation system have generally benefited from weaker rather than stronger IP rights, as weaker rights have reduced the risk they bear of litigation and facilitate their access to technology.

45 See Kitch (1997) "The nature and function of the patent system" 20 Journal of Law and Economics 265.

46 See Merges and Nelson (1990) "On the complex economics of patent scope" 90 Columbia Law Review 839.

47 This is not to deny that duplication can bring benefits also in the form of a wider diffusion of innovative skills, increased product differentiation and the occasional serendipitous discovery. However, the fact remains that, with a non-rivalrous good, the productive inefficiency (a rectangle) associated with duplication will generally outweigh the reduction in deadweight loss associated with increased competition (merely a triangle).

48 On the economic impacts of which see Bowman Jr (note 34 *supra*), Bowman Jr. (1973) Patent and Antitrust Law: A Legal and Economic Appraisal 64-139 and Rey and Winter (1999) Exclusivity Restrictions and Intellectual Property. These contract provisions can serve four major efficiency-enhancing purposes: they can prevent inefficient substitution when the good protected by the IP right is used in variable proportions; they can control double marginalisation; they can enhance the efficiency of metering and hence of price discrimination, which itself can lead to higher output; and in the face of transactions costs that impede complete contracts, they can reduce the risks of post-contract opportunism and better align the incentives of the contracting parties. However, this does not mean that they will invariably enhance efficiency. Moreover, other practices, such as pooling and joint pricing among potentially competing rights-owners of similar patents, clearly have the potential to act as conduits for horizontal price fixing.

49 The efficiency costs of obstacles to the licensing and assignment of IP rights are well illustrated by reference to the technological histories of the UK, France and the US in Macleod (1991) "The paradoxes

This tells against merely exposing the exercise of IP rights to full application of the **TPA**; but it cannot be an argument for retaining s.51(3) in its current form. Even abstracting from the errors and inconsistencies in the section's wording and substance – for example, the far narrower exemption that seems to be granted to copyright than to patents[50] -- the uneven coverage of the provision (which exempts horizontal price fixing but not resale price maintenance) lacks policy justification. There is consequently a clear case for reform.

The National Competition Council, after considering a number of options in this respect, has recommended some tidying up of the provision, along with an exclusion from its effect of "price and quantity restrictions"[51]. Given that restrictions other than these are unlikely to breach the **TPA**, this exclusion would seem to swallow the rule. It is consequently questionable whether it would advance the purpose of promoting efficiency in the allocation and use of IP rights. Rather, the need seems to be for an exemption that would shield licenses and assignments from the **TPA**'s per se provisions while still ensuring that conduct that used IP rights to capture monopoly rents – that is, income in excess of the differential efficiency contributed by right-owner's creative efforts – would be subject to the competition statute. It is this goal that the recommendation set out in the Interim Report of the Intellectual Property and Competition Review Committee seeks to serve.

Matters are no less complex in respect of the exempting provisions relevant to Parts IIIA and XIC **TPA**. While the policy rationale underlying these exemptions is not clear, it may be that it was considered unnecessary to subject IP rights to the access regimes these Parts create, as specific arrangements for third party access existed in the IP statutes themselves. While this is broadly correct, the fact remains that (as has been noted above) these arrangements are flawed in important respects, not least in lacking competition tests of the kind required for declaration under Part IIIA.

Again, this is not an argument for removing the exemptions: the structure of Parts IIIA and XIC **TPA** are not such as to readily accommodate the special concerns third party access to IP rights entails. However, it does suggest that if the exemptions are retained, consideration will need to be given to placing the access arrangements provided for in the individual IP statutes on a sounder footing.

**Conclusions**

The interaction of the competition and IP laws in Australia has generally been viewed through the prism of the exemptions from the competition statutes granted to certain aspects of the exercise of IP rights by s.51(3) **TPA**. This has led to a tendency to under-estimate the role of competition factors in shaping specific provisions of the IP statutes, and hence to over-look the "IP-specific competition regimes" these provisions embody.

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of patenting: invention and its diffusion in 18th and 19th century Britain, France and North America" Technology and Culture, 885.

50 This arises from the operation of the "relates to" requirement which, in the context of copyright, is specified (in s51(3)(a)(v)) as referring to "the work or other subject matter in which the copyright subsists". This appears to exclude copies or reproductions of the work or other subject matter, which would presumably be the main subject of conditions in a license or assignment.

51 National Competition Council (1999) Review of Sections 51(2) and 51(3) of the Trade Practices Act 1974: Final Report 243.

The analysis set out above has highlighted some of the tensions between these regimes and the more general conception underpinning the **TPA**. It seems reasonable to embody competition concerns in the IP statutes when those concerns form an intrinsic part of the eligibility tests for the right, or when a competition and efficiency test, applied to a particular use of the right, would lead to a bright line rule governing the use of that right. It is recognised that such rules (for example, the deeming provisions contained in the Australian fair dealing regime) can have costs of their own, most notably in the greater difficulty imposed on attempts to adjust outcomes to the facts of particular cases. But where the costs of detailed investigation and adjudication are high, properly chosen and sculpted rules of this kind can reduce the costs of litigation and of legal uncertainty by more than any social losses they impose. Where this balance is best assessed in terms of a particular IP right, and the scope of any resulting rule confined to that right, reliance on provisions in the IP statutes themselves seems clearly warranted.

What is less apparent is the appropriate treatment of provisions which involve, or ought to involve, case-by-case determination of competition matters. Where the provisions themselves need to be adapted to the specific circumstances of an IP right, there are good reasons for embedding the provisions within the statute that defines and regulates that right. This would reduce the risk of statutory inconsistencies arising, as has occurred with respect to s.51(3) **TPA**. Additionally, it could make clearer the scope of the right being granted. However, the provisions themselves, and the tests they embody, ought to reflect the competition tests used more widely in the economy. So too should the procedures for the enforcement and administration of those tests, unless a compelling case can be made for reliance on specialised processes (as may be true with respect to the jurisdiction of the Copyright Tribunal).

Once a greater measure of consistency is achieved between the competition provisions of the IP statutes and the generally accepted concepts of competition policy, the issues associated with s.51(3) **TPA** can be more readily dealt with. It is important to ensure that the provisions of the TPA are not used to trump IP rights, but rather are applied from the premise that the rights grant the rights-owner the scope to secure, at least temporarily, an income stream reflecting the efficiency gain to society from the rights-owner's creative effort. However, when the rights are used to seek rents above and beyond those gains – as occurs, for example, when IP rights are used as a means of horizontal collusion – then the rights should not shield the rights-owner from the general competition policy. This implies that the rights-owner should not be exempted from the competition provisions of the **TPA** when the rights are being used to substantially increase the rights-owner's market power relative to the market power granted by the right itself. This effect can be achieved by exempting the exercise of the rights from the provisions of Part IV TPA, except when those rights are being used to substantially lessen competition.

Some degree of tension between the goals and content of the IP statutes on the one hand, and the competition laws on the other, is inevitable. Additional difficulties arise from the fact that the IP laws are not a field for tidy minds. Unlike the competition policy, which must face the ultimate test of economic efficiency, the IP laws lack a unifying concept, and the fact that they must adapt to challenges constantly created by rapid technological change leads, especially but by no means solely in the area of copyright, to a considerable degree of complexity in the relevant provisions.[52] In the need to react and respond to changing circumstances, inconsistencies can all too readily arise, and then persist, between the solutions adopted in the IP statutes and the efficiency-oriented tests that should underpin a competition policy approach. Not all of these can or even should be resolved, given the costs the search for complete consistency would necessarily entail. The current situation, however, is one that can and should be improved, not only so as to achieve greater benefit to the community as a whole from creative effort but also so as to place the rights and obligation of owners of IP rights on a more stable, certain and secure basis.

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[52] Oakeshott's more general observation rings especially true in this context, to the effect that "the significance of power is always in relation to its task, and while power to integrate has increased, so has the variety of activities to be integrated. The skill of the bowler is greater, but so also is the versatility of the batsman." Oakeshott The Politics of Faith and the Politics of Scepticism (1996) 64