Sui Generis Intellectual Property Law Reform: Issues for Australia

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This article begins by describing the current range of intellectual property rights in Australia (statutory and common law/equity), then canvasses recent reforms that seek to address some of the problems raised by new innovation practices. A particular focus of the article is the piecemeal nature of the law reform process which continues to treat the law in this area in a highly compartmentalised fashion. Some tentative proposals for improvement are made at the end.

I INTRODUCTION

While skeptics have wondered aloud whether intellectual property rights are really necessary in order to stimulate innovation (or whether the costs are worth the benefits), the overwhelming anecdotal evidence now appears to be that proprietary rights in information produced by "sweat of the brow" are not only desirable but sometimes essential. There are many apocalyptical stories of innovators being the first to develop a new product or process but unable to participate in the profits that were subsequently generated. The experience of EMI, the original producer of the CAT scanner, for which its scientist won a Nobel prize, who

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See further M Richardson, J Gans, F Hanks and P Williams The Benefits and Costs of Copyright: An Economic Perspective (Centre for Copyright Studies, Sydney, 2000).

lost its position in the market within 8 years is one.² Other examples include Bowmar, who introduced the pocket calculator, Xerox who invented the office computer only to find many of its features copied by Apple, and – to use a recent Australian example - Philips who within a few years of introducing the long-life light-bulb onto the Australian market found the market swamped by cheaper copies.³ First-mover advantages count for something so innovators may not lose out completely. But, without legal proprietary protection, their success depends on a host of other skills which many small players in particular may not have and even large players may singularly lack. For many if not most innovators, the two most important "environmental factors" conditioning their success are the efficacy of legal protection mechanisms and the nature of their technology.⁴ If the technology is inherently capable of exclusivity legal proprietary protection may not be needed. But if codified rather than tacit information is the norm, intellectual property rights become increasingly significant to the innovator's ability to appropriate the economic benefits arising from their innovations.

Given that starting point, there is a real question whether the various intellectual property systems that are currently available in Anglo-Australian jurisdictions are sufficiently broad to respond to the needs of innovators; and, further, whether the law reform process is sufficiently well adapted to enable the law to develop sufficiently speedily to keep up with the demands of new innovation practices.

In the following sections of this paper, I begin by canvassing the scope of the current systems; then consider some of the features of new innovation practices which have tested their boundaries; and the trend of reforms which have sought to deal with these. At the end I make some tentative proposals for future intellectual property law reform.

These and other stories are recounted by D Teece in his article "Capturing Value from Innovation" [1991] Les Nouvelles 21. See also D Teece "Profiting From Technological Innovation" in D Teece (ed) The Competitive Challenge: Strategies for Industrial Innovation and Renewal (Ballinger Pub, Cambridge (MS), 1987) 185.

The Mirabella lamp was introduced onto the Australian market in 1990, some 2 years after the Philips lamp was available in commercial quantities, at a price of approximately 2/3 the price of the Philips original: for the ensuing litigation see *NV Philips v Mirabella International Pty Ltd* (1995) 183 CLR 655.

⁴ Teece, above n 2 - or at least in the present climate of limited government expenditure on direct financial support for innovation.

II THE CURRENT MENU OF INTELLECTUAL PROPERTY LAWS

The main features of the existing intellectual property systems are set out in tabular form in an Appendix to this paper. Briefly they can be summarised as follows. First, there are the common law and equitable rights that support self-help measures of protection. These include contract law and the equitable doctrine of breach of confidence which protect the secrecy of information during the development and commercialisation phase of a new product or process (although their value is obviously greatest for tacit information which can be kept "secret");⁵ as well as the law of passing off supplemented by the doctrine of misleading or deceptive conduct under s 52 of the Trade Practices Act 1974 (Cth).⁶ These offer a certain scope of protection for an innovator's commercial reputation against misrepresentations that another trader's goods or services are those of the claimant⁷ or there is some other association between them, for instance - and as is increasingly common in recent cases - sponsorship or approval.⁸ The last development in particular has led to a new energy for these laws protecting commercial reputation.

Beyond that, there are the usual regulatory systems of intellectual property protection. Copyright law grants rights over original works ("works" now defined in the Copyright Act 1968 (Cth) to cover virtually anything which has a material expression, including computer

- 5 So, for instance, a product that can be reverse engineered on the market to reveal its secrets stands little chance of protection: as the plaintiff found to its cost in a recent UK case: *Mars UK Ltd v Teknowledge Ltd* (1999) 46 IPR 248 (EWHC).
- 6 Section 52 of the Trade Practices Act 1974 (Cth) provides that "a corporation shall not, in trade or commerce, engage in conduct that is misleading or deceptive or is likely to mislead or deceive" (and there are also parallel provisions not limited to corporations in the Australian State and Territory Fair Trading Acts).
- 7 See Reckitt & Coleman Ltd v Bordern Inc [1990] RPC 341 (HL). For equivalent scope attributed to the operation of s 52, see Parkdale Custom Built Furniture Pty Ltd v Puxu Ltd (1982) 149 CLR 191.
- Passing off was articulated in broad terms of misrepresentation of association by the House of Lords in the *Advocaat* case: *Erven Warnink BV v Townend* [1979] AC 731 (HL). But arguments regarding sponsorship or approval have been taken particularly far in Australia, now endorsed by the High Court (the use of the famous Nike label held to pass off and breach s 52 Trade Practices Act 1974 (Cth) when adopted for the defendant's sports perfume) *Campomar Soc Ltd v Nike International Ltd* (2000) 46 IPR 481 (HCA).
- 9 The main systems are discussed below. Other even more tailored systems are the Circuit Layouts Act 1989 (Cth) and the Plant Breeder's Rights Act 1994 (Cth).

programs, as a species of "literary work")¹⁰ and related subject-matter including published editions, films and broadcasts; whereas patent law covers "inventions" (defined in the Patents Act 1990 (Cth) as "any manner of new manufacture the subject of letters patent and the grant of privilege within section 6 of the Statute of Monopolies").¹¹ Subsidiary rights over designs apply under the Designs Act 1906 (Cth) – although the term "design" is misleading here since protection in Australia is still confined to features of appearance of industrial articles.¹² The Trade Marks Act 1995 (Cth) grants rights in "trade marks", covering "signs" including shape, sound or scent that distinguish a trader's goods or services from those of other traders in the market place.¹³ The Act also extends its remedial provisions beyond the use of deceptively similar trade marks for registered goods or services (traditionally the focus of statutory trade mark law) to cover also other uses that are likely to deceive or confuse or will diminish the value of a trade mark that is "well known" in Australia.¹⁴ The broad scope of this Act in extending to trade mark "dilution" was largely driven by Australia's adherence to the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPs) 1994.¹⁵

There are also exceptions and limitations to the statutory rights including, in the case of copyright, rather narrowly defined exceptions for "fair dealings" and rather more elaborately defined statutory licence schemes covering for, for instance, copying by

- 10 Copyright Act 1968 (Cth), s 10(1), although even before that the High Court had accepted that source code could be a literary work: Computer Edge Pty Ltd v Apple Computer Inc (1986) 161 CLR 171.
- 11 Patents Act 1990 (Cth), Sch 1. For that term interpreted by the High Court in an early case to require a "useful" and "vendible product" and, more specifically, an "artificially created state of affairs" that would not otherwise exist see *NRDC v Commissioner of Patents* (1959) 102 CLR 252.
- 12 Designs Act 1906, s 4.
- 13 Trade Marks Act 1995, s 17; and see 6 for the definition of "sign".
- 14 Trade Marks Act 1995, s 120(3) and see for a brief discussion *Campomar v Nike*, above n 8, 493-494. Judgment of the Court.
- 15 Agreement on Trade-Related Aspects of Intellectual Property Rights (1994). This well known Agreement which was signed as an Annex to the Uruaguay Round of the GATT negotiations is binding on members of the World Trade Organisations and sets minimal standards for not only trade mark law but also copyright (adopting and supplementing the standards of the Berne Convention) and patent and design laws.
- 16 Copyright Act 1968 (Cth), ss 40-43, 103A-C. Certain specific exceptions also apply to decompilation of computer programs (eg for error correction, to establish interoperability) in new provisions enacted at the end of 1999: Copyright Act 1968 ss 47B-H.

educational institutions administered by the collecting societies.¹⁷ More generally, of course, ideas are regarded as outside the scope of protection accorded to copyright works. And the fact that the law is mostly concerned with reproduction and some types of dissemination provides an additional constraint on ownership rights notwithstanding the, admittedly very long, period of protection.¹⁸ In the case of patents and designs, the balance of interests can be found in requirement for disclosure of the invention or design, free use after limited term of protection (recently increased to 20 years for standard patents following TRIPs)¹⁹ and compulsory licensing of inventions permitted when the innovation is not properly exploited²⁰ although this is rarely actually taken up in practice. Trade mark protection is premised on the basis of use of the trade mark as a trade mark and satisfaction of requirements for registration including no likelihood of deception or confusion and sufficient distinctiveness.²¹ In addition factors arising after registration leading to likely confusion or genericism may also provide a basis for rectification of a trade mark lawfully registered.²² The interests of competing trade mark users are protected through provisions permitting prior and honest concurrent users to use and even register their trade marks;²³ and other "good faith" exceptions apply to the exclusiveness of a registered owner's rights.²⁴

There are obviously benefits to these regulatory systems of protection in providing wider and more security than any of the self-help based regimes - and the patent and design systems provide the extra security above copyright law of a registered right, permitting a

- 17 For instance (photocopying by educational institutions): Part VB.
- 18 Generally 50 years from the year of the author's death for a published copyright work and otherwise from the year of first publication: Copyright Act 1968 (Cth), ss 33-34. Shorter periods apply for subjectmatter other than works and performances.
- 19 The patent term for a standard patent now 20 years from the patent date (with possibility of extension for pharmaceutical patents); and up to 6 years for a petty patent); Patents Act 1990 (Cth), ss 67-68. The maximum term for a registered design is 16 years: Designs Act, s 27A.
- 20 Patents Act 1990 (Cth), s 133 onwards.
- 21 Trade marks Act 1995 (Cth), ss 41, 43-44, s 60 especially. For rectification of a registered trade mark permitted on the basis that it should not originally have been registered: see also s 88(2)(a).
- 22 Trade marks Act 1995 (Cth), ss 87, 88 (2)(c), although note an exception applies to these grounds for cases in which the ground did not arise through any "act or fault" of the registered owner.
- 23 Trade marks Act 1995 (Cth), s 44.
- 24 See defences to infringement set out in Trade Marks Act 1995 (Cth), s 122-124.

certain degree of "monopoly" protection in preventing even independent development.²⁵ This registered monopoly protection is seen as especially valuable in the case of patent law which is the only one of the three registration systems which has the protection of functional - ie useful -innovation as its immediate purpose (even though the protection of function is not actually precluded under any of the systems).²⁶ But on the other hand copyright has the distinct advantage of being broad-encompassing. For a start this covers an extraordinarily wide variety of literary, dramatic, musical and artistic "works" and related subject-matter whose only common purpose may be "to provide information and instruction, or pleasure". 27 Similarly, the standard of originality is set very low at "skill and labour" and protection for other subject-matter is not premised on originality at all. Further, copyright is not dependent on formal steps of registration being taken and is automatically international in its effect. Once protection is derived in one country which is a member of the wide-ranging Berne Convention or the TRIPs Agreement - which Australia is, as most of the world's countries are - it automatically extends within the others as well on equivalent terms.²⁹ Each of the statutory intellectual property systems has its strength as well as its weaknesses as far as innovators are concerned. But they seem to provide more clear and certain protection of innovation per se than any of the common law and equitable systems which operate within confined boundaries that may have little to do with the character or value of the innovation concerned.

For these reasons, even when common law and equitable self help measures may be available, an innovator may well prefer one or more of the regulatory systems of protection

²⁵ As the Acts explicitly state: Patents Act 1990 (Cth), s 13 (patent gives "exclusive rights, during the term of the patent, to exploit the invention"); Designs Act 1906, s 25 the owner of a registered design has a monopoly in that design". Note however Patents Act 1990 (Cth), s 119 which provides an exception to infringement for a prior continuous user of the (undisclosed) invention.

²⁶ And the Designs Act 1906 (Cth) states that the fact that a design is functional does not preclude its registration: s 18(1).

²⁷ See, for this standard used to define a literary work, in particular: Exxon Corporation v Exxon Insurance [1982] Ch 119, 143 (CA) per Stephenson LJ.

²⁸ See Data Access Corp v Powerflex Services Pty Ltd (1999) 45 IPR 353, 375 (HCA). See also for an historical discussion of the originality concept under Anglo-Australian law, S Ricketson The Law of Intellectual Property: Copyright, Designs & Confidential Information (Law Book Company, Australia, 1999) ch 7 at 7.35-7.105.

²⁹ Copyright Act 1968 (Cth), s 184 and Copyright (International Protection) Regulations.

notwithstanding the tradeoffs prescribed in the particular intellectual property "bargain" prescribed under the statute. Copyright and patent – being the broadest in subject-matter scope – have in Australia, as elsewhere, emerged as the dominant systems for intellectual property protection in the latter part of the 20th century. However, they are under increasing pressure.

III RECENT TRENDS IN INNOVATION PRACTICES

In the last quarter of the 20th century there have been some important developments in innovation practices which raise fundamental questions about the established boundaries of the existing laws. Before, the different systems of protection may not have been ideally suited to all the major categories of innovation but their rough and ready dividing lines were basically sufficient.³⁰ Now the logic of the dividing lines between the formal categories of protection that we inherited from an earlier age have been blown apart the realities of the new "information age".

Most spectacular here is the shift from tacit to codified information that new technology has facilitated and encouraged. As Ergas has recently observed.³¹

[T]he recent period has been characterised by the dramatic expansion in that share of knowledge which is codified relative to that which is not.

In part, this trend reflects compositional shifts in the pattern of inventive activity. A much greater share of invention today involves software, which of its nature comes in codified form. Additionally, the revolution in biology has increased the share of innovations arising in the life sciences. These are areas which have always been very close to applied science, and in which knowledge lends itself to formulaic description.

However, it is not only compositional shifts that are at work. Rather, and perhaps even more interestingly, areas of knowledge that were traditionally regarded as tacit are now ceasing to be so, as codification spreads to even greater parts of the technology base ... Perhaps the most significant reason for this change is the ever more widespread use of IT in the innovation process ...

³⁰ Compare J Reichman "Legal Hybrids Between the Patent and Copyright Paradigms" (1994) 94 Colum L Rev 2432; P Samuelson, R Davis, M Kapor & JH Reichman "A Manifesto Concerning the Legal Protection of Computer Programs" (1994) 94 Col L Rev 2308.

³¹ H Ergas "Changes in the Science and Technology System and Some of Their Implications for the Protection of Intellectual Property" (1999) 39 IP Forum 28.

While tacit information was particularly well suited to protection under contract and confidentiality laws, codification of information raises the question of whether the security of information needs to be more broadly protected against all forms of unauthorised access and use. Couple this with the Internet which has wrought fundamental changes in the processes available for diffusing information. The Internet makes diffusion of codified information very easy.³² But at the same time codified information, travelling in small packages through complex interrelated networks across national boundaries can be intercepted and appropriated by others in ways that can be difficult to monitor or prevent.³³ Given all this it is not surprising that even sophisticated technological self-help measures have proved inadequate to protect the security of information, placing more and more pressure on the statutory systems to provide legal support where previously this may not have been needed.

Codification is not the only issue though. A blurring of the formerly clearer dividing lines between form and function is also a feature of new information products. Digital information is a particular example of information that transcends the form-function divide that separates copyright, design and trade mark law on the one hand - and patent law on the other. It is concerned both with the expression of ideas and with achieving highly utilitarian outcomes. It is "literary" in the sense that it is informative and instructive but it is also functional in the sense that it has a clear utilitarian purpose (instructing a computer to perform certain actions that otherwise would have to be performed mechanically) which may actually

³² For an account of the impact of the Internet as a new form of "architecture" on the generation, distribution and appropriation of information, see L Lessig "The Law of the Horse: What Cyberlaw Might Teach" (1999) 113 Harv L Rev 501.

³³ As pointed out by D Lindsay Copyright Infringement Via the Internet DP No 11 (Centre for Media, Communications and Information Technology Law, May 2000) 9-11.

³⁴ See, for instance, copyright cases *Trumpet Software v Ozemail Pty Ltd* (1996) 34 IPR 481 (FCA) where the defendant had downloaded the plaintiff's shareware off the Internet (before the timelock was introduced) in order to publish it to subscribers to its computer magazine; *Autodesk v Dyason* (1992) 173 CLR 330 where the operation of the plaintiff's locking mechanism was investigated through an oscilloscope, the defendant's software effectively reproduced the unlocking function; and (pleading breach of copyright as well as breach of confidence) *Mars UK Ltd v Teknowledge Ltd*, above n 5, where even encryption of the plaintiff's EEPROM was insufficient to prevent reverse engineering.

³⁵ See M Richardson "Australian Intellectual Property Law: The Form/Function Dilemma: A Case Study at the Boundaries of Trade Mark and Design Law" [2000] 7 EIPR 314.

protection quite problematic.³⁶ Unauthorised "reproduction" is not so much the issue as unauthorised use; yet the information product is not innovative enough for the most part to justify protection against independent development under the rigorous standards of the current patent regime.³⁷ Finally, although the work of an author or authors, the product relies on a significant degree of technological input, entails little or no "moral" element of personality and, one might think, hardly justifies a term of protection of years calculated beyond the death of the author. It was TRIPs that ultimately insisted computer software should be regarded as a literary work for copyright purposes.³⁸ But the functional nature of the information concerned means that it truly tests the boundaries of copyright law.³⁹

High cost and high risk are also features of the new information age, notable for some major international research projects aimed at fundamental breakthroughs at a level never before experienced. The biggest of these is the Human Genome Project began in 1990 as a \$US3 billion, 15 year coordinated effort of scientific teams from around the world to identify the estimated 100,000 or more human genes that make up the human genome with enormous anticipated medical and other social benefits. For massive projects of this scale funding may come from governments as well as private bodies whose preference is to share the information publicly once it becomes revealed. Intellectual property rights may not be

- 36 So the High Court in *Data Access v Powerflex*, above n 28, 368-70 determined that even if the functionality does not automatically lead to the conclusion that the idea, not the expression, is at stake (copyright does not extend to ideas) then there may be other reasons not to protect the information under copyright law. For instance, the plaintiff's computer programming language which did not fall within the statutory definition of a "computer program" (in its raw form considered merely to be "data") was found to be non-original and also an "insubstantial" work. Further, although the macros used in the plaintiff's application development system, were accepted to be computer programs and thus literary works, the defendant's adoption of similar macros for a competing system (which also used the same language) was held to simply reproduce the function or "idea" rather than the expression itself.
- 37 Although patents are already being granted to some software products. Here, apparently, Australian courts are following the United States trend: C Wood "Patents in Computer Software Commercially Useful is Not Enough" (1998) 9 AIPJ 134; N Stoianoff "Patenting Computer Software: An Australian Perspective" [1999] EIPR 500.
- 38 TRIPs, art 10(1).
- 39 As others have also pointed out: Reichman and Samuelson, Davis, Kapor & Riechman above n 30.
- 40 See Human Genome Management Information System "US Human Genome Project 5 Year Research Goals 1998-2003" http://www.ornl.gov/TechResources/Human_Genome/hg5yp/.
- 41 Compare Ergas, above n 31, also pointing to the experience with initial funding of the Internet through the US Department of Defence (on the condition that the information be freely published).

needed and even in economic terms may be undesirable.⁴² But at the next level down, intellectual property rights still appear to drive the research. So to take one Australian example Florigene, the Australian biotechnology company working on the blue rose, is said to spend \$2.5 million a year in R&D and hopes to recoup that under the patents it has applied for world-wide when a product is eventually launched on the market.⁴³ Investors argue that patent protection is necessary to ensure that innovators and those who invest in innovation can capture benefits associated with innovation in these fields to offset the risks and costs of the research projects.⁴⁴ Yet here also the grant of any intellectual property protection has been controversial with a real questioning of whether the benefits of exclusivity provided under a patent system are worth the broader social costs (limited access by others for a now significant period of up to 20 years - longer possibly for pharmaceutical products, and closing off of independent development).⁴⁵ And patent theory is yet to offer any clear answer the the optimal patent

⁴² The arguments here go well beyond the economic arguments that for the fundamental building blocks of innovation, government support is preferable to private property rights: discussed by J Stiglitz "Knowledge as a Global Public Good" in I Kaul, I Grunberg, M Stern *Global Public Goods* (UNDP, Oxford University Press, 1999) 308, 320.

⁴³ See "Foreign Partners Help Company to Blossom" in *Small Enterprise Business Angels* http://www.brw.com.au/root_brw/content/010698/brw27.htm>.

There is no doubt that risk as well as cost is a factor in their assessments: A 1988 study by Venture Economics found that US venture capital firms generally rely on a few successful investments to offset losses: for 383 investments made by 13 firms from 1969-1985, more than 1/3 ended in absolute loss while 6.8% resulted in payoffs greater than 10 times the cost, yielding almost 50% of the end value of the firms' portfolios: see O Pfirmann, U Wupperfeld and J Lerner *Venture-Capital and New Technology Based Firms* (Physica-Verlag, 1997) 42.

⁴⁵ Some of the policy issues are canvassed with respect to methods of medical treatment (of uncertain patentability under Australian law) by Finklestein J in *Bristol-Myer Squibb Company v FH Faulding & Co Ltd* (2000) 46 IPR 553 (FCA), 594-6 (only to conclude that the matter should be resolved by Parliament).

protection with respect to high cost, high risk innovations which may prove to be of fundamental social importance. 46

A fourth trend can be observed at the other end of the spectrum where a massive increase in low-level incremental innovation, particularly involving consumer goods and services, appears to be driven by substantially larger discretionary income in the western industrial world than in earlier generations.⁴⁷ As Leaffer comments: ⁴⁸

Significant changes in the production and marketing of consumer goods has occurred since the 1970's. Formerly, companies seldom revamped their product lines. The difference today is startling. Take, for example, two heavily advertised products, sneakers and automobiles, and consider how many models were available twenty-five years ago for each. The likely answer is only a handful. Today, in comparison, Nike introduces new sneaker models every six weeks. Peruse any Sunday newspaper supplement and one finds hundreds of models of automobiles for sale.

As yet, there seems to be no direct source for recouping the investment costs made in these innovations (and although trade marks may provide a useful source of reducing at least commercialisation costs, the role and function of trade mark law in supporting the promotional value of trade marks is still being explored).⁴⁹ Patent law sets a high innovation

- 46 For standard rationales for patenting, explained in terms of high cost and long-lead time to a marketable product, see K Dam, "The Economic Underpinnings of Patent Law" (1994) 23 J Leg Stud 247. But as yet there is no really coherent theory of the optimal scope of patent protection: see R Merges and R Nelson "The Complex Economics of Patent Scope" (1990) 90 Colum L Rev 839.
- 47 It is hard to believe that in the rich countries it was only a century ago that food, clothing and shelter absorbed 80% of the average household's consumption: see R Fogel *The Fourth Great Awakening and the Future of Egalitarianism* (U of Chicago Press, 1999).
- 48 M Leaffer "The New World of International Trademark Law" (1998) Marq Intell Prop L Rev 1, 5.
- See, for instance, the Australian case of *Coca-Cola v All-Fect* (1999) 47 IPR 481 (FCA) where the famous Coca-Cola bottle shape was adopted without authority for the defendant's sweets. The Full Federal Court held there was prima facie trade mark infringement (subject to a defence being established on the basis that no confusion would result from the use); see also *Campomar v Nike*, above n 8, where a remedy was granted against the unauthorised use of the Nike label for sports perfumes under the law of passing off and under s 52 of the Trade Practices Act 1974 (Cth). Interestingly neither of these results was premised on trade mark dilution which might lead to even greater protection for promotional trade marks: M Richardson "Promotional Trade Marks and Trade Mark Law in Australia: Recent Cases" [2000] Ent L Rev 189.

threshold of inventiveness which low level innovations can hardly meet;⁵⁰ design law by its terms and in its construction only protects non-functional features of appearance with the scope of protection narrowly construed in the cases to require an almost exact imitation.⁵¹ The unspoken assumption of the courts seems to be that, with no clear justification for monopoly rights being granted to low-level functional innovations, the monopoly-based legislative regimes should be narrowly construed.

IV THE LAW REFORM PROCESS AND ASSOCIATED PROBLEMS

The legal response to the changing demands wrought by the new innovation practices so far has been characterised by two distinct features. First, a resistance by courts to any significant rewriting of the common law and equitable causes of action to provide any substantially broader scope of protection, including explicit rejection of a common law doctrine of "unfair competition" on a number of occasions. Second, an ever-increasing process of piecemeal *legislative* reform as the various interest groups become active in pursuing their particular agendas in the law reform process.

- 50 Even reading this in where the statute itself does not appear to provide for it directly: NV Philips v Mirabella International Pty Ltd, above n 3 (the plaintiff's long-life light bulb held non patentable on grounds that it failed even the threshold of a "manner of new manufacture" in the Patents Act 1990 (Cth)). See also Bristol-Myer Squibb v Faulding, above n 45 (the plaintiff's method for administering taxol held to be insufficiently novel even for a petty patent, applying a domestic prior art base). For the generally poor patent infringement success rate in Australian cases briefly documented, see M Richardson and S Macchi "Intellectual Property Cases in the Australian High Court: An Economic Reappraisal" [1997] 3 EIPR 4.
- 51 Notwithstanding that the Designs Act 1906 states that functionality is not a bar to registration, courts have consistently construed infringement not to extend to functional features: see for instance Firmagroup Ltd v B&D Doors Ltd (1994) 180 CLR 483; Philips Electronics NV v Remington Products Australia Pty Ltd (1999) 44 IPR 551 (FCA). For the poor success rate of design owners in infringement cases, see S Ricketson, "Towards a Rational Basis for the Protection of Industrial Design in Australia" (1994) 5 AIPJ 193.
- 52 The Australian High Court has rejected the desirability of a common law doctrine of "unfair competition" on the grounds, inter alia, that competition is generally desirable, an unfair competition doctrine would be inconsistent with the limits prescribed in the established causes of action, and its application would only lead to uncertain and subjective judgments: Victoria Park Racing and Recreation Grounds Co Ltd v Taylor (1937) 58 CLR 479; Moorgate Tobacco Co Ltd v Philip Morris (No 2) (1984) 156 CLR 414; Campomar v Nike International Ltd (2000) 46 IPR 481, 483-4 (HCA).

A particular example is the recently enacted (but not yet in force) Copyright Amendment (Digital Agenda) Act 2000.⁵³ The primary purpose of this Act, which was sponsored by the Attorney-General's Department and the Department of Communications, Information Technology and the Arts, is to bolster the strength of copyright protection in digital works, particularly for the online environment, and to implement international standards in the WIPO Copyright Treaty (1996) and WIPO Performances and Phonograms Treaty (1996).⁵⁴ Its centerpiece is a technology-neutral right of "communication" to the public which will supercede the older more technology-specific broadcast and cable-diffusion rights, and is framed specifically with communications over the Internet in mind.⁵⁵ In addition, it provides that the commercial production of or dealing in circumvention devices whose purpose is to circumvent or facilitate the circumvention of "technological protection measures" for preventing copyright infringement is itself an infringement of copyright, giving rise to civil and criminal penalties.⁵⁶ The Act is controversial in many respects and its interpretation is

- 55 See Copyright Amendment (Digital Agenda) Act 2000 (Cth), ss 35, 37, 88 and 6 (definition of "communicate" as "make available online or electronically transmit ... ").
- 56 Copyright Amendment (Digital Agenda) Act 2000 (Cth), ss 98 onwards, inserting a new Division 2A ("Actions in relation to circumvention devices and electronic rights management information"). A "circumvention device" is defined as a "device (including a computer program) having only a limited commercially significant purpose or use, or no purpose or use, other than the circumvention or facilitating the circumvention, of a technological protection measure": s 4. A "technological protection measure" is, in turn, defined as "a device or product, or a component incorporated into a process, that is designed, in the ordinary course of its operation, to prevent or inhibit the infringement of copyright in a work or other subject-matter by either or both of the following means: (a) by ensuring that access to the work or other subject-matter is available solely by use of an access code or process (including decryption, unscrambling or other transformation of the work or other subject-matter) with the authority of the owner or licensee of the copyright; (b) through a copy control mechanism": s 15B.

The Copyright Amendment (Digital Agenda) Bill was introduced into the House of Representatives on 2 September 1999 and referred to the House of Representatives Standing Committee on Legal and Constitutional Affairs which tabled its Advisory Report on the Bill on 6 December 1999: see http://www.aph.gov.au/house/committee/laca/digitalagenda/contents.htm. This led to a number of amendments. The Act was finally passed on 17 August 2000 and will come into force on 4 March 2001, six months after it received Royal Assent. For prior studies which led to the Bill the Copyright Convergence Group Highways to Change: Copyright in the New Communications Environment (AGPS, August, 1994) and a Discussion Paper from the Attorney-General's Department on Copyright Reform and the Digital Agenda (July, 1997).

still to be finally resolved.⁵⁷ But more fundamentally, it does not challenge the scope of the copyright model with respect to essentially functional digital works. There must still be an original copyright work (or other subject-matter) for protection to arise and rights against unauthorised use per se are not granted, with reproduction and specified categories of dissemination still the focus of rights.

A second example is a new Patents Amendment (Innovation Patents) Act 2000 (enacted in November and also yet to come into force). This implements the Australian Council on Industrial Property's proposed petty patent reforms aimed at providing an "innovation patent" with a lower standard of inventiveness than presently applies.⁵⁸ The "innovation" new standard is defined simply in terms of a "substantial contribution" made to the working of the invention.⁵⁹ The difficulty, as pointed out already by commentators, is that in other respects the changes would be few. Importantly, the rights will still be full monopoly rights, registration will be a prerequisite for protection, and an 8 year term of protection will apply.⁶⁰ It is not clear at all that low-level functional innovations – which one could imagine others might easily independently devise in ignorance of another's pre-existing rights – would require such a substantial degree of protection excluding others from exploiting the products of their own ingenuity and investment. As such, the likelihood is that courts will, mindful of this, continue to interpret the monopoly rights narrowly with rigorous attention paid to their standards. It is questionable whether significant extra protection will – or should - be available to low level innovation if simply treated as an add-on to the patent system.⁶¹

⁵⁷ See, for instance, the Standing Committee report, above n 53, and for a useful commentary and critique, K Weatherall "An End to Private Communication in Copyright? The Expansion of Rights to Communicate Works to the Public" [1999] EIPR 342 (Part 1) and 398 (Part 2); Lindsay, above n 33.

⁵⁸ Advisory Council on Industrial Property *Review of the Petty Patent System* (AGPS, 1995). The innovation patent system will replace the current petty patent system, see further L Rymer "The Future of Industrial Property" (1998) 9 AIPJ 113.

⁵⁹ Patents Amendment (Innovation Patents) Act 2000, s 5. Compare Advisory Council on Industrial Property, above n 58, 32, recommendation 2, in effect adopting the expanded novelty test set out in *Griffin v Isaac* (1938) 12 AOJP 739.

⁶⁰ Patents Amendment (Innovation Patents) Act 2000, ss 7, 38.

⁶¹ See, for criticisms of the recent United States experience with expansive patenting: see R Merges "As Many as Six Impossible Patents" Before Breakfast: Property Rights for Business Concepts and Patent System Reform" (1999) 14 Berk Tech LJ 577.

Anticipated design law reform emerging from an Australian Law Reform Commission review will also see some changes made to design law in an effort to provide slightly more rigorous standards for registration and, it is hoped, a more generous basis for infringement premised on the copyright standard of "substantial similarity" rather than the current design standard of imitation. ⁶² But earlier proposals for a short-term unregistered design right (protecting only against reproductions) were abandoned ⁶³ – in part at least, it seemed at the time, at the instigation of patent attorneys who feared a reduction in design registrations would follow. Further, the proposals and the reforms that are anticipated as a result of them fail to address the problem of providing adequate protection for *all* features of designs that – albeit in a fairly minimal way in terms of the degree of innovation - combine both new and useful function with an innovative style of presentation. Again there is no significant attention given to whether monopoly rights (to extend for a period of 15 years) are desirable for low-level designs, ⁶⁴ the reforms simply engrafting design law even more closely onto the patent model. ⁶⁵

Among the most radical and wide-ranging proposals for reform to date is the Copyright Law Review Committee's report on *Simplification of the Copyright Act 1968.* ⁶⁶ This offers a major restructuring and updating of the copyright system devised, in particular, with digital information in mind. Proposals include expanding the fair dealing exceptions into a broader exception based on fair use, ⁶⁷ and transforming the current categories of original "works" and other "subject-matters" into "creations" and "productions", each with the own standard of

- 62 Australian Law Reform Commission *Designs* (Report No 74, 1995). Most of the reforms recommended have been accepted by the Government: see Rymer, above n 58.
- 63 ALRC Designs (Discussion Paper 58, 1994) ch 12.
- 64 Indeed the commissioner responsible for the reference raised this question himself: J Lahore "Intellectual Property Rights and Unfair Copying: Old Concepts, New Ideas" [1992] EIPR 428, 430.
- 65 ALRC Report above n 62, para [10.7], recommendations 105 and 106. Note that even TRIPs only mandates a 10 year term, and contains no requirement for registered design rights: see arts 25 and 26.
- 66 Copyright Law Review Committee Simplification of the Copyright Act: Part 1 Exceptions to the Exclusive Rights of Copyright Owners (AGPS, September 1998); Copyright Law Review Committee Simplification of the Copyright Act: Part 2 Categorisation of Subject Matter and Exclusive Rights and Other Issues (AGPS, February 1999). For useful commentary on the proposed changes see S Ricketson and C Cresswell The Law of Intellectual Property: Copyright Designs & Confidential Information: Supplement No 1 (LBC Inf Services, 2000).
- 67 See Simplification of the Copyright Act: Part 1, above n 66, ch 6.

originality.⁶⁸ The current reproduction and distribution rights granted, as well as the additional rights anticipated under the Digital Agenda Act, would be renamed "reproduction" and "dissemination to the public" and would be supplemented by a new set of "moral rights" (as already anticipated in the Copyright (Moral Rights) Bill 1999 (Cth)).⁶⁹ But the most controversial aspects of the proposed reforms are that the originality standard for a creation should be "significant intellectual effort", a standard which looks nearer the most demanding European standard than even the United States requirement for more than "sweat of the brow", ⁷⁰ and that the reproduction right in the case of a mere production would be limited to literal copying, or "exact reproduction". This raising of the originality threshold for full copyright protection to be available could severely restrict the rights available under copyright law to digital information products as well as other low-level innovations, such as databases, which currently fall within the copyright aegis, raising questions as to the incentives for their development.⁷² But even this may be too simplistic. For there may well be unanticipated perverse effects from a higher originality standard for copyright if, rather than removing intellectual property protection for low level innovations, the result is that innovators gravitate even further to other systems (especially given the innovation patent reforms). That the appropriateness of those systems versus copyright is never addressed in the CLRC review is a serious problem, if an understandable one given the limited terms of reference.

⁶⁸ See Simplification of the Copyright Act: Part 2, above n 66, ch 5. The term "originality" is avoided, however.

⁶⁹ Other recommended changes include abolition of the material form requirement, removal of authorial references in the current Act, endorsement of the Digital Agenda Bill's technology-neutral right of communication, as well as, on the basis that the Copyright Treaty 1996 would be implemented, a right of distribution relating to physical embodiments but (as in the US) effectively limited to first sale: see Simplification of the Copyright Act: Part 2, above n 66, 71-2 and further, 36-8.

⁷⁰ See J Spoor "Copyright Protection and Reverse Engineering of Software: Implementation and Effects of the EC Directive" (1994) 19 U Dayton L Rev 1063 and generally, for the European standards, G Metaxas-Maranghidis (ed), Intellectual Property Laws of Europe (Chancery Law Publ Ltd, 1995).

⁷¹ This was not a unanimous recommendation: for a strong minority report see: Simplification of the Copyright Act Part 2, above n 66, 92-3.

⁷² See, for a critique from an economic policy perspective of a higher originality standard, Richardson, Ganks, Hanks and Williams, above n 1, 16-21.

V CONCLUSIONS AND THE FUTURE

It has been argued in this paper that, while the current *sui generis* process of intellectual property law reform may work well for the most part, it encounters problems when innovation practices fundamentally change. The deeper question is whether a piecemeal law reform process that fosters the engrafting of changes onto a disparate range of intellectual property rights can fully and efficiently respond to the needs of innovation.

No easy solutions are available. For instance, proposals made in the past for a general Australian intellectual property law reform commission, ⁷³ while appealing in principle, seem unlikely to eventuate in the current political climate and without the right mix of expertise and authority in those appointed to the body would not necessarily result in more coherent and comprehensive reform (or deliver change at the speed which technological change demands) than under the current arrangements. ⁷⁴ Similarly, the idea of an intellectual property code which has occasionally been mooted, although not very seriously, might do little more in practice than the Copyright, Designs and Patents Act 1988 (UK) – consolidating rather than codifying the law in any meaningful way. Is major change needed anyway if, in general, the *sui generis* process works moderately well? In many ways it seems to be a basically suitable approach for common law jurisdictions which have emphasised the benefits of incremental rather than revolutionary change to meet new situations, "muddling along" until clearer principles and policies emerge.

Nevertheless, as the New Zealand Law Commission advocated for New Zealand in its report on *Intellectual Property Law Reform* in 1990,⁷⁵ a number of changes to the legislative law reform process may be both feasible and effective including:

- 73 As, for instance, recommended some eight years ago by S Ricketson, "The Future of Australian Intellectual Property Law Reform and Administration" (1992) 3 AIPJ 3. See also S Ricketson Intellectual Property Administration and Policy in Australia: An Examination of the Australian Situation, Past and Present, and Recommendations for Future Change (National Innovation Summit, Melbourne, 9-11 February 2000, http://www.isr.gov.au/industry/summit/).
- 74 The experience with placing design law reform under the aegis of the Australian Law Reform Commission, at the beginning touted by some as a possible body to take broader responsibility for intellectual property law reform in the future, is salutary in this respect. Although they commented that a full review of the need for broader unfair competition laws in Australia was needed (Australian Law Reform Commission, above n 62, 5), the report's own recommendations discussed above show all the hallmarks of piecemeal *sui generis* law reform.
- 75 Law Commission Intellectual Property: The Context For Reform (Report No 13, 1990) 14-16.

- a closer working relationship between the different institutions involved in reviewing
 aspects of intellectual property (the coordinated responsibility of the AttorneyGeneral's Department and Department of Communication, Information Technology
 and the Arts for the Digital Agenda Act provides a useful model);
- contemporaneous treatment of major legislative changes to the various intellectual
 property systems to improve consistency between them (although not, of course, if
 this comes at the expense of achieving reforms in areas where this is urgently
 needed);
- closer coordination of law reform with efforts overseas to address the same issues (something which has already increased substantially through the last decade of law reform, fostered by a number of important international conventions on intellectual property rights aimed at harmonising national laws, including TRIPs (1994), the WIPO Copyright Treaty (1996) and Performances and Phonograms Treaty (1996)).

In addition there is much to be said for the Commission's proposal that an independent advisory body, providing a single disinterested source of advice on intellectual property matters, could address some of the problems of *sui generis* law reform process - including the absence of a coherent policy on intellectual property law matters.⁷⁶

But more generally, it is the common law and equitable remedies which seem to be most deficient in responding to change and filling the gaps left by the legislative systems which being inevitably political respond most easily to organised and vocal interests. A partial solution is broader construction of these doctrines to accommodate new innovation practices.⁷⁷ New doctrines may also be needed. So in other jurisdictions an evolving body

Taw Commission, above n 75, 15-16. This has been recommended for Australia on many occasions: see, for instance, "The Future of Australian Intellectual Property Law Reform and Administration", above n 73, 29; Intellectual Property Committee of the Law Council of Australia (Chair S Ricketson) Intellectual Property Law Reform and Administration (Canberra, 1992); Intellectual Property Administration and Policy in Australia, above n 73, 51 (commenting that the Intellectual Property Consultative Committee established in 1991 under the auspices of the Attorney-General's Department and IP Australia, which might have had that role, has in practice simply operated as a clearing house for information sharing rather than as an agent of unification and coordination of policy).

As I have argued elsewhere: see M Richardson "Breach of Confidence, Surreptitiously or Accidentally Obtained Information and Privacy: Theory Versus Law" (1994) 19 MULR 673; M Richardson "Copyright in Trade Marks: On Understanding Trade Mark Dilution" [2000] IPQ 66; M Richardson "Reverse Engineering and Optimal Trade Secrecy Protection in the Age of TRIPs" conference paper, Australasian Intellectual Property Conference, Coolangatta, 1999.

of *sui generis* common law doctrines covering "idea submission", "hot news misappropriation", rights of "publicity" and "privacy",⁷⁸ and more broadly "parasitic trading" and "slavish imitation"⁷⁹ combine to provide a more comprehensive set of remedies to mediate between the interests of innovators and others. Hopefully in the future Australian courts will address the gaps in their own laws more effectively, drawing on appropriate policies and principles, rather than continuing on in the hope that it is for the legislature always to adapt *its* laws to meet new situations and circumstances.

⁷⁸ See American Law Institute *Restatement Third of Unfair Competition* (1995), pointing out that these have superseded the short-lived "unfair competition" doctrine of *International News Service v Associated Press* (1918) 248 US 215 which Australian courts have often pointed to as having suffered an unfortunate demise soon after the concept of "reaping without sowing" was enshrined in the US law.

⁷⁹ French and German concepts respectively: discussed generally by A K Sanders *Unfair Competition Law: The Protection of Intellectual and Industrial Creativity* (Clarendon Press, 1997) ch 3.

APPENDIX I

Basic Features of the Main Intellectual Property Rights Currently in Force in Australia

LEGAL	SOURCES OF	SUBJECT	FORMALITIES	TERM	INFRINGEMENT/
CATEGORY	LAW	MATTER			BREACH
Trade	Equitable	Equitable	Registration not	Indefinite so	Unauthorised use
secrets	doctrine of	doctrine's	required	long as	of the information.
	breach of	elements are:	(protection is	confidentiality	The public interest
	confidence.	(1)	automatic within	is maintained	provides a basis
	Also	confidential	Australia).	(or contract	for exception but
	contractual	information;		continues in	there are very few
	rights where a	(2) "normally"		effect).	cases and the
	contract can be	imparted in			scope and basis is
	identified.	confidence			unclear.
		(third parties			
		also liable and			
		some courts			
		have accepted			
		liability for			
		surreptitiously			
		obtained			
		information);			
		(3)			
		unauthorised			
		use.			
		Contract			
		defines scope			
		of contractual			
		rights subject			
		to restraint of			
		trade doctrine.			
	1				

LEGAL CATEGORY	SOURCES OF LAW	SUBJECT MATTER	FORMALITIES	TERM	INFRINGEMENT/ BREACH
Copyright	Copyright Act 1968 (Cth)	Original literary, dramatic, musical or artistic work. Subject-matter other than works, for instance published editions, broadcasts, television and sound recordings. Performers' rights	Registration not required (protection is automatic within Berne jurisdiction on making of work or other subject matter, or the performance).	Works - generally 50 years from the death of the author. Other subject- matter - 50 years from date made. Performers' rights - generally 20 years from performance.	Reproduction, publication, broadcast, performance etc of work plus limited rights re secondary distributions. Copying, broadcast, and secondary distribution of other subject- matter; and recording, broadcasting of performance. Exceptions for "fair dealings", certain specific exceptions for decompilation of computer programs, and some statutory licences provided.

LEGAL CATEGORY	SOURCES OF LAW	SUBJECT MATTER	FORMALITIES	TERM	INFRINGEMENT/ BREACH
Patents	Patents Act 1990 (Cth)	Novel and inventive "inventions" (defined as a "manner of new manufacture") which are "useful" and have not been secretly used as specified. The prior art base for "standard" patents is partly international; for petty patents the prior art base is domestic.	Registration and disclosure required for protection in Australia.	Standard patents - 20 years from patent date (extension permitted for pharmaceutica 1 patents). Petty patents - up to 6 years from patent sealing.	Exploitation of patented invention and importation and supply of products. Very limited exceptions. Provision allowed for compulsory licensing of unworked inventions.

LEGAL CATEGORY	SOURCES OF LAW	SUBJECT MATTER	FORMALITIES	TERM	INFRINGEMENT/ BREACH
Designs	Designs Act 1906 (Cth)	Novel or original "designs" (features of shape, configuration, pattern, ornament applied to articles of manufacture) – measured against domestic prior art base.	Registration and disclosure required for protection in Australia.	Term of up to 16 years from date of filing date (including 2 renewals).	Application of design or obvious or fraudulent imitation to an article covered by registration. Limited defences/ exceptions.

LEGAL CATEGORY	SOURCES OF LAW	SUBJECT MATTER	FORMALITIES	TERM	INFRINGEMENT/ BREACH
Trade Marks	Trade Marks Act 1995 (Cth)	Distinctive and non-deceptive trade marks (defined as "signs" to be used to distinguish a trader's goods or services in the market) – Must also be use or intended use of the trade mark in Australia.	Registration required for protection in Australia (or within a designated part of Australia).	Term of 10 years from filing date, renewable unless removed for non-use or cancelled for invalidity (inc supervening). Cancellation in few cases subject to exception concerning "no act or fault" by registered owner.	Use of a substantially identical or deceptively similar trade mark for registered goods or services or – in limited circumstances - other goods or services (including special protection against dilution for trade marks which are well known in Australia). Subject to specific exceptions such as good faith use of own name, honest concurrent user.

LEGAL CATEGORY	SOURCES OF LAW	SUBJECT MATTER	FORMALITIES	TERM	INFRINGEMENT/ BREACH
Passing off; misleading or deceptive conduct	Equitable doctrine of passing off. Section 52 Trade Practices Act 1974 (Cth), and provisions in State/ and Territory Fair Trading Acts	Passing off if (1) reputation (2) misrepresent- ation of an association by another trader likely to deceive consumers and (3) damage or likely (ie imminent) damage. Section 52 generally concerned with misleading or deceptive conduct in trade, as are provisions in State/Territ- ory Fair Trading Acts.	Registration not required (protection is automatic in Australia or geographic region).	Indefinite while misrepresent- ation continues.	Any misrepresentation of association which is likely to deceive the public but more specifically effected through the adoption of the plaintiff's trade marks and other signs to deceptively suggest an association.

 ${\it APPENDIX~2}$ Some Anticipated Amendments to the Statutory Systems 80

LEGAL CATEGORY	SOURCES OF REFORM	SUBJECT MATTER	ANTICIPATED REFORMS
Copyright	Copyright Amendment (Digital Agenda) Act 2000 (Cth)	Digital works	Replace current broadcast and cable diffusion rights with a general right of "communication" to the public. Insert provisions directed at penalising commercial manufacture and dealings in circumvention devices (designed to avoid technological protection measures).
	Copyright Amendment (Moral Rights) Bill 1999	Moral rights	Insert rights of integrity and attribution for works and cinematographic films
	CLRC Simplification Report: Part 1	Fair Dealing Exceptions	Replace current fair dealing exceptions with a general open-ended exception for fair use. The current categories of fair dealing to be listed as examples.

⁸⁰ This table does not include reforms anticipated to be proposed by the Intellectual Property & Competition Review Committee in its final report (due end September 2000) but not yet publicly released. In its interim report (April 2000) the Committee made some tentative recommendations regarding the statutory provisions regarding parallel imports and s 51(3) of the Trade Practices Act 1974 (Cth) (allowing limited exemptions to the scope of the trade practices law for intellectual property "contracts, arrangements and understandings" made pursuant to the statutory systems). This was followed by the Committee's Report on Parallel Importing under the Copyright Act 1968 (Cth) issued June 2000, which recommended repeal of the parallel import provisions in the Act which provide limited rights to copyright owners to geographically segment markets.

LEGAL CATEGORY	SOURCES OF REFORM	SUBJECT MATTER	ANTICIPATED REFORMS
	CLRC Simplification Report: Part 2	Categorisation of Subject Matter, etc	Remove requirement for "material form", remove distinction between works and other subject-matter with new categories of creations and productions; increase originality threshold for "creations" to substantial intellectual effort ("labour and effort" for productions); rights for creations to comprise reproduction, dissemination (including Digital Agenda communication right and a further secondary distribution right if WIPO Copyright Treaty 1996 to be implemented) and moral rights; rights available to productions are more limited exclude non-literal reproductions and moral rights.
Patents	Patents	Innovation patents.	Replace petty patent system with a new "innovation patent" with a lower standard of innovation defined in terms of substantial contribution (prior art base international though). Term of protection to be 8 years.
Designs	ALRC report on designs	Designs.	Increase threshold requirements for design registration to require novelty and "distinctiveness" (defined in terms of "substantial difference in overall appearance" from previous designs). Extend infringement to encompass substantial similarity. Some revision also of the terms of the Copyright Act's provisions regarding

infringement following industrial
application of a corresponding design (to
deal with specific drafting problems
encountered).