### The First Steps in Remedying the Relationship between Patents and Competition

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### 1. Introduction

Modern statutory competition laws such as the Australian *Trade Practices Act* 1974 (Cth) ('*Trade Practices Act*') evolved out of the common law, probably because of a failure of the private right of action to sustain the broader public interests in vibrant competition and free trade (see Donald and Haydon 1978. pp. 2-4; Letwin 1954). Together with this evolution has been the development of the idea that markets, and the competitive forces operating independently in those markets, are best placed to make decisions about how societies scarce resources might best be allocated for the benefit and desires of the majority of consumers (see Hilmer 1993, pp. 1-6). As a cornerstone of modern market economies like Australia, competition laws are now considered necessary to drive innovation delivering better quality products and services to consumers at lower prices by improving productivity and economic efficiency (being technical or productive efficiency, allocative efficiency and dynamic efficiency: see, for example, Hilmer 1993, pp. 3-5).

The rationale of government regulation in implementing (and enforcing) competition laws is to keep modern market economies open for competition by limiting conduct that is detrimental to competition for the benefit of consumers (Hilmer 1993, pp 1-16). Importantly though, these regulations should be directed to protecting the competitive process rather than favouring particular sectors of the economy (Hilmer 1993, p. 26). However, a tension remains in some dealings with patents under the *Patents Act 1990* (Cth) ('*Patents Act*') where the statutory patent privilege results in monopoly pricing or restricts access to the patent protected product or process *more* than the social advantage secured by the property right (see Landes and Posner 2003, pp. 372-385; Scotchmer 1991, pp. 30-32; see also, for examples, Gifford 2003, pp. 1695-1718; Carrier 2002). Significantly, the privileges granted by patents under the *Patents Act* are of a different character to other forms of property (see Ergas 2000, p.

11), essentially being a right to the sale of the idea in the patent protected product or process, *together with* a statutory privilege to control how the patent protected product or process is used (Boldrin and Levine 2004, p. 328).[1] It is this control of downstream uses of the patent protected product or process, and its leverage to achieve other business purposes that is the concern of competition law, recognising that it is only when a dealing (or a refusal to deal) with the patent protected product or process lessens competition in the 'market' that competition laws become relevant.[2] That is, where a patent holder refuses to deal, imposes anti-competitive conditions in proposed license agreements, or otherwise acts (anti-competitively) in a way that would not be possible without some form of market power. Australia provides a case study of the interaction between patent laws and competition regulations, illustrating the 'exceptionalism' granted to patents over broader competition concerns, and the failure to grapple with critical competition issues at the interface between patents and competition laws.

The current Australian consensus appears to be that the purposes of patents and competition laws are 'largely complementary' with patents promoting innovation,[3] and competition laws 'keeping markets open and effective' in order to 'preserve[] the primary source of the pressure to innovate and to diffuse innovations' (Ergas 2000, p. 6; see also United States Department of Justice and the Federal Trade Commission 1995, p. 7). However, the actual boundaries between patents and competition law are a lot more problematic reflecting the different ways they seek to achieve their purposes – there are 'serious problems of assessing effects, but not conflicting purposes' (Bowman 1973, p. ix; see also Stonier 1984, pp. 22-25).[4] As the laws currently stand, the *Trade Practices Act* seeks to promote the process of competition through rivalry between competitors for the custom of consumers, theoretically increasing consumer access to goods and services and reducing prices (Hilmer 1993, p. 4). In contrast, patents under the *Patents Act* limit this competitive process by granting exclusivity to only some innovative ideas that satisfy the minimum legislated requirements for patentability. While the optimal scope and duration of statutory patent privileges is unknown (and unknowable),[5] the current *Patents Act* reflects:

(a) Australia's commitments to international minimum patent standards as part of the World Trade Organisation's *Agreement on Trade Related Aspects of* 

Intellectual Property Rights and the Australia-United States Free Trade Agreement;

- (b) The Australian Government's standards set out in the *Patents Act* and *Trade*Practices Act, the way the standards are applied by IP Australia and the courts, and a general policy imperative for productivity and economic growth (for a recent overview of the Australian Government's patent policy see Lawson and Pickering 2004, pp. 363-366; see also Lawson 2008); and
- (c) The application and exercise of patent privileges within the boundaries of other statutory regulation schemes, such as the requirement for 'the quality, safety, efficacy and timely availability of therapeutic goods' under the *Therapeutic Goods Act 1989* (Cth) before a patent protected therapeutic agent may be marketed (see s 4(1)).

However, there remains ongoing debate in Australia about the most appropriate form of competition regulation that balances the objectives of competition law against the necessary incentive for innovation addressed by the patent (recent inquires examining the interface between patent privileges and competition law include Weisbrot 2004; Dawson 2003; Ergas 2000; Samuel 1999). Two of the central unresolved questions are:

(a) The content and application of regulation to achieve the policy initiatives to improve business investment in innovation, stimulate growth of innovative firms, strengthen commercial linkages between publicly funded research institutions and industry, and take promising research to the stage of commercial viability (see, for example, Commonwealth of Australia 2001a, p. 18). The place of legislated patent privileges, and in particular 'stronger' patent privileges,[6] in achieving these policy outcomes has failed to address the quality and performance of the regulation required by the high level *Competition Principles Agreement* that forms part of the *National Competition Policy* (see National Competition Council 1997). That is, *demonstrating* that the benefits of restricting competition to the community as a whole outweigh the costs (*Competition Principles Agreement* cl 5(1)(a)), and that the

- objectives of the patent privileges can only be achieved by restricting competition (*Competition Principles Agreement* cl 5(1)(b)); and
- (b) The nature and scope of exemption that s 51(3) of the *Trade Practices Act* should allow for license and assignment dealings with patent protected products and processes. In other words, how should patent license and assignment conditions be exempt from the Pt IV of the *Trade Practices Act* (the competition laws) that is generally concerned to restrict contractual practices that involve fixing or controlling prices, exclusionary provisions, exclusive dealings and mergers and acquisitions that might restrict competition. As a generalisation these restrictions are against contractual practices that adversely affect prices, quantities, and qualities of presently or potentially available varieties of goods and services (Explanatory Memorandum 1974, pp. 4-8).

This chapter examines these two areas of competition that might deliver better outcomes: first the benchmark for regulatory quality and performance according to the *Competition Principles Agreement* (CPA), and secondly the evolution and application of the existing pro-competition measures in s 51(3) of the *Trade Practices Act*. The chapter concludes with a brief discussion and the conclusion that a detailed competition analysis of the patent privileges set out in the *Patents Act*, and their exercise according to the *Trade Practices* Act, has been avoided and should be addressed to deliver better quality and performing laws. Such laws are more likely to promote innovation without the detrimental effects of inappropriately restricted competition.

## 2. Regulatory quality and performance of the *Patents Act* according to the *Competition Principles Agreement*

The Australian Government, as part of the Council of Australian Governments (CoAG) and its agreements, has undertaken an extensive review of its regulations and government actions to remove anti-competitive arrangements that cannot be justified to achieve an identifiable benefit or 'public interest' (see National Competition Council 2003, pp. 13.1-13.7; Rimmer 2006, pp. 3-6). This has included some institutional changes, related reforms to the electricity, gas, water and road transport

industries, and various regulation reforms (see National Competition Council 1997). The regulation reforms have primarily been implemented through the CPA (see Productivity Commission 2000, pp. 1-10).[7] Essentially, this involves examining existing (and proposed) regulation against a pro-competition template (*Competition Principles Agreement* cl 5(3)) with a view to establishing that the regulations in force across the Commonwealth are 'efficient' in terms of 'maximising the benefits to the community taking account of the costs', and 'effective' in 'addressing an identified problem' (Office of Best Practice Regulation 2007a, p. 1; see also Productivity Commission 2003, p. 1).

The approach to conducting, and the content of, these regulation reviews under the CPA is primarily addressed in the Terms of Reference, although there may be additional considerations (see, for example, *Competition Principles Agreement* cl 5(9)) mandatory procedures (see, for example, Office of Best Practice Regulation 2007a, p. 1) and guidance from other sources (see, for example, Centre for International Economics 1999; see generally National Competition Council 2004). Essentially, the objectives in conducting the regulation reviews are to assess whether the arrangements restrict competition; whether the benefits to the community as a whole outweigh the costs (including the broader assessment of the 'public interest') and that it can clearly be demonstrated that the benefits exceed the costs; and whether the same objects could be achieved by other better (more pro-competitive) means (Centre for International Economics 1999, p. 7; *Competition Principles Agreement* cl 5(1)).

Following the CPA program proposed by the Australian Government, Ergas (the Intellectual Property and Competition Review Committee) undertook a review of intellectual property legislation (excluding the *Plant Breeder's Rights Act 1994* (Cth)) (Ergas 2000). The Terms of Reference provided, in part, that the review 'shall have regard to: (a) the determination, in the CPA, that legislation which restricts competition should be retained only if the benefits to the community as a whole outweigh the costs, and if the objectives of the legislation can only be achieved by restricting competition' (Ergas 2000, p. 217). However, the Terms of Reference also included specific matters that the review 'shall inquire into and report ... on', including 'the objectives of, including the nature and magnitude of the problems

sought to be addressed by ... the *Patents Act 1990*', 'the nature of the restrictions in the legislation on competition', 'the likely effect of those restrictions on competition', alternative means of achieving the same objectives, and the 'costs and benefits' and 'appropriateness, effectiveness and efficiency' of the legislation, restrictions on competition and alternatives (Ergas 2000, p. 217). These requirements are consistent with the CPA (*Competition Principles Agreement* cl 5(9)).

Ergas set out its vision of the impact of intellectual property privileges on competition, including patents:

... it is important to recognise that competition occurs in a number of dimensions. More specifically, firms do not only compete in the prices they set but also in their ability to develop new processes and to design and market new products. This dynamic competition is of special importance. In effect, rather than simply reallocating existing resources, it expands the resources on which society can draw and allows for sustainable increases in living standards. It is also important because in practice it is the main way established market positions are over-turned, and the threat of competition made into an ever-present constraint on the conduct of firms. An effective system to define and enforce intellectual property rights is critical for this type of dynamic competition to occur on a material scale (Ergas 2000, p. 5).

Importantly, Ergas expressed the view that the interaction between intellectual property and competition was 'largely complementary' with intellectual property promoting innovation and competition policy 'keeping markets open and effective, preserves the primary source of the pressure to innovate and to diffuse innovations' (Ergas 2000, p. 6). However, recognising that intellectual property privileges do have social costs, Ergas conceded:

Intellectual property laws must ... involve some balance between the incentives to invest in creative effort and the incentives for disseminating material that is the subject of intellectual property protection. This balance turns on determining the appropriate scope of protection, in terms of the conditions under which protection is granted, the scope and effectiveness of the exclusive privileges provided by protection, and the duration of the protection given. Balancing between providing incentives to invest in innovation on one hand, and for efficient diffusion of innovation on the other, is a central, and perhaps the crucial, element in the design of intellectual property laws. In the Committee's view, it is essential that the terms of this balance be clearly set out in the intellectual property laws themselves, so that rights owners and users can be certain about the scope and content of the grants being made (Ergas 2000, p. 6).

In addressing patents specifically, Ergas rejected the notion that Australia might apply a higher threshold standard to non-resident patent applicants (Ergas 2000, p. 139), and presented a particular perspective on the benefits of patents in Australia:

... effective patent protection facilitates trade in technology, both domestically and internationally. An effective patent system, accessible to foreign technology suppliers, allows Australian firms to import technology that would otherwise be unavailable, or would only be available at higher cost. This increases productivity and enhances competition in the Australian economy. The importance of technological imports is illustrated by the more than 90 per cent of patents registered in Australia, which are owned by foreigners. In addition, there are more indirect cross-border spillovers through importing of goods which embody innovations and which may be used as intermediate inputs or sold directly to end-users (Ergas 2000, p. 139).

Ergas did, however, present some assertions in support of its perspective about the benefits of patent privileges. It argued that the private value of research and development was much less than the social value (Ergas 2000, p. 137), and that patent privileges were the best system yet devised to balance the trade-off between maintaining incentives to invest and fostering the diffusion of new technology (Ergas 2000, p. 143). Unfortunately these assertions, while not contentious as a generalisation, gloss over, for example, the hotly contested and disparate debate about the appropriate scope and allocation of patent privileges that Ergas itself had identified in discussing balancing incentives and exploiting intellectual property generally (see Ergas 2000, p. 6).

Interestingly Ergas did cite 'uncertainty as to which of several contending parties will receive patent protection and how much protection patents will afford' as an 'imperfection' in the existing patent privilege scheme (see Ergas 2000, p. 143). Further, Ergas's analysis and conclusions were not based on Australia's experience with patent privileges, but rather relied on international comparisons that were then assumed to be applicable to Australia.[8] Ergas then concluded that patent privileges can lead to 'losses in allocative and productive efficiency' but '[i]n practice ... a patent holder can rarely act as a pure monopoly, because of the availability of alternative and substitute products and processes, and also because some scope for imitation almost always exists' (Ergas, p. 138).[9] The loss of some 'dynamic

efficiency' in the development of derivative innovations was also acknowledged, but again, '[t]o some extent dynamic losses are counteracted by the disclosure of ideas as part of the *quid pro quo* of granting a patent and that the patent system itself ... facilitates the use of licensing' (Ergas 2000, p. 139). Ergas then reached an 'overall' conclusion:

Overall, the Committee agrees with Scherer that 'the patenting system is recognised to be an imperfect instrument. Nevertheless, it may be the best solution policy man can devise to the difficult trade-off between, on the one hand, maintaining incentives for investment and, on the other hand, fostering the diffusion of new technology's benefits to consumers and to those who might make leapfrogging inventions' (Ergas 2000, p. 143).

Having adopted this conclusion, the view that compliance with international patent standards was beneficial to Australia (Ergas 2000, pp. 27 and 139-141) and a part of Government policy (see Ergas 2000, pp. 216-217), and its gloss on the debates about appropriate patent scope and allocation, Ergas accepted the existing legislated scheme for patent privileges and identified a number of improvements that might promote more competition in the application of the threshold tests and the duration of the patent term (Ergas 2000, p. 144). However, these issues were examined from Ergas's particular concern about the economic effects of the certainty of the patent grant (Ergas 2000, pp. 143-144), both granting patents that should not be granted and not granting patents that should be granted (see Ergas 2000, p. 153). From this perspective Ergas considered threshold test improvements including requiring a specific, substantial and credible use be defined (Ergas 2000, pp. 151-154) and that the scope of prior art be expanded for assessing inventive step (Ergas 2000, pp. 154-156 and 168-170). It was suggested that other requirements be restricted including prior use (Ergas 2000, pp. 157-159) and compulsory licensing (Ergas 2000, pp. 162-163). On patent term, Ergas 'believed' there was not enough evidence to extend the patent term, although they did suggest that raising renewal fees might be applied to 'extract a lower economic rent' (Ergas 2000, pp. 144 and 156).

While these assessments and recommendations certainly affect competition, the Ergas approach avoided assessing the contentions about the appropriate balance of patent scope and allocation and how this might be countered when the social costs were

judged to be too high (such as the appropriate threshold of 'public interest' before a compulsory license is to be granted). The flaw in Ergas's approach, albeit an approach that was open to the review according to its Terms of Reference, was to avoid any analysis of the controversy about the most appropriate threshold requirements in the Patents Act. For example, different theories about the objectives of patent privileges propose very different threshold standards depending on what the patent scheme is intended to achieve. Ergas failed to clearly identify what patent privileges in Australia are intended to achieve (see Ergas 2000, pp. 136-138) and to consider the most appropriate test in achieving this objective (see Ergas 2000, pp. 154-156). Comparing the 'reward theory' and the 'prospect theory' illustrate this contention. The 'reward theory' views a patent as an incentive to undertake uncertain invention with an opportunity to appropriate greater commercial returns. This is considered to foster socially beneficial inventions, but with significant social costs on short term inefficiencies in the market from the anti-competitive effects of the patent (primarily restricted output and higher prices) appropriating public goods (ideas) that would otherwise be used (see, for example, Machlup 1958). In contrast, the 'prospect theory' views patents as promoting the commercial development of inventions with patents granted to early stage inventions facilitating the bringing of a usable invention to the market and acting as an incentive to maximise the commercial value from exploiting the invention with relief from free-riders (see, for example, Kitch 1977; Merges 1992). These different theories pose significantly different consequences for shortterm competition. The 'reward theory' imposes high thresholds for patentability seeking to limit patents to only those inventions that would not have been made with significant concerns about the effects on competition. In contrast, the 'prospect theory' imposes lower thresholds giving the patent holder control over the development process and possibly increasing the efficiency of commercialisation (that otherwise may not occur) with less concern about the effects on competition.

Perhaps the major flaw in Ergas's assessments and report was that it adopted different approaches (or CPA methodologies) to different intellectual property statutes, a more rigorous approach being applied to the Ergas majority's consideration of parallel importing under the *Copyright Act 1968* (Cth) that *Patents Act* patents. Significantly, the Ergas majority objected to many of the very same issues that were glossed over in its analyses of the *Patents Act* (Ergas 2000, pp. 134-178). In addressing parallel

importing under the *Copyright Act 1968* (Cth) the Ergas majority was able to structure its analysis of the issues very differently, and reach a very different conclusion, suggesting that the benefits of parallel import restrictions did not outweigh the detrimental anti-competitive effects, and that the restrictions should be repealed entirely (Ergas 2000, p. 5). The contention here is that if Ergas had applied the same CPA methodology to *Patents Act* patents, the outcome would have been a more rigorous and informed analysis of the patent scheme in the context of promoting competition.

The Ergas majority accepted that copyright had a 'utilitarian justification of protecting and promoting investment in creative effort to secure, for the Australian community, gains associated with investment' (Ergas 2000, p. 61) so that the privileges granted needed to be 'assessed in terms of whether the benefits they may bring, in improved investment in, and access to the results of, creative efforts, outweigh the costs they impose' (Ergas 2000, p. 62). Further, '[t]his assessment of the impact of the restrictions needs to include analysis of the wider costs and benefits associated with those impacts' (Ergas 2000, p. 62). The majority's key concern about parallel import restrictions appeared to be market segmentation with the ability to then charge higher prices (and possibly restrict availability) for materials subject to copyright (Ergas 2000, p. 62). In effect, this was an assessment about international exhaustion of copyright.

From this bases the majority was able to reject arguments about economic incentives to create (Ergas 2000, pp. 49-51 and 66-69), prices and availability (Ergas 2000, pp. 51-53 and 64-69), remainder books (Ergas 2000, pp. 54-55 and 64), marketing and services (Ergas 2000, pp. 55-56 and 66-69), censorship (Ergas 2000, pp. 56-57), piracy (Ergas 2000, pp. 57-60), and economic analysis that favoured maintaining the existing restrictions (Ergas 2000, p. 65), because they failed to satisfy the CPA criteria (Ergas 2000, p. 73). The most significant difference between the majority's dealing with parallel imports and patent privileges was the detailed approach to addressing the analysis of whether a restriction on competition was justified:

The Committee started from the premise that restrictions on competition need to be justified. In other words, the Committee, consistent with the NCP [National Competition Policy] and the CPA,

accepts that the onus of making a case lies with those who would prevent, limit, or in other ways restrict, competitive forces from operating.

More specifically, we accept that those who would restrict competition should establish the restrictions are in the public interest, rather than merely serving the interests of particular producers. The Committee believes that this well-established principle – requiring those who would restrict competition to demonstrate the need to do so – appears to be fully justifiable.

However, experience and analysis amply demonstrate the importance of competition in promoting efficiency and underpinning prosperous, open economies. It also demonstrates the frequency with which restrictions on competition, though claimed to serve wider interests, have been used to confer above normal profits on narrow groups at the expense of the community. A presumption, albeit a rebuttable one, in favour of competition, is consequently clearly reasonable.

Such a presumption also places the evidentiary burden on those best placed to demonstrate the position. The reality is that the benefits from restrictions on competition generally accrue to concentrated groups, while the costs of these restrictions are spread widely throughout the community. Given this spreading of costs, it is far more difficult for those adversely affected by restrictions to organise themselves and present their case, than it is for the direct beneficiaries to support the restrictions.

As a result, the Committee believes that it is reasonable to expect those who would introduce or perpetuate restrictions to provide convincing evidence of why the restrictions are in the public interest.

It follows that the relevant test is whether the material made available to the Committee establishes that the restrictions these provisions impose on competition confer benefits on the community that outweigh their costs.

In cases where arguments put to us appear weak, the Committee actively sought further information and tried to analyse the arguments in the best light. As a result, we are convinced that we have provided the differing points of view with a fair and thorough hearing (Ergas 2000, p. 61).

The different approach (or CPA methodology) of the Ergas majority in directly addressing the arguments about theoretical benefits of particular policy settings for parallel importing, and the absence of this analysis for patent privileges, is perplexing and unexplained. Significantly, the majority questioned the assumptions and assertions of benefit that copyright privileges under the *Copyright Act 1968* (Cth) were protecting and promoting investment. Had Ergas applied a similar critical

analysis of patent privileges then the debates about appropriate patent scope and allocation would probably have been more closely examined and the requirements of the CPA more properly addressed. Further, broader issues such as the high costs of patented pharmaceuticals, non-tariff trade barriers, ethical considerations about patenting life, and so on, may have required consideration in more broadly assessing the 'public interest'. With respect, this approach appears to more closely fit with the CPA and the principle articulated in the Hilmer report directed to promoting competition. Further, such an analysis of patent privileges is more likely to deliver some insight into the effects of patent privileges and their likely benefits for the Australian community.

With parallels to Ergas's approach to patent privileges, the Ergas minority view accepted the assumptions and assertions of benefit, and therefore concluded that parallel import restrictions in the *Copyright Act 1968* (Cth) were justified:

It is true that the ability to restrict parallel imports gives rise to an economic rent in favour of the copyright owner. However this rent encourages innovation and investment, and is precisely the foundation on which copyright is based. Allowing parallel imports reduces the incentives to innovate or invest. It is submitted that the costs incurred in removing the restriction will exceed the costs (in economic terms) of retaining that power (Ergas 2000, p. 74).

The consequence of the Ergas minority accepting this approach, and this was certainly open to the minority, was to avoid the broader assessment of the anti-competitive effects of copyright and a proper assessment of the criteria set out in the CPA. Significantly, these are exactly the flaws in Ergas's assessment of the *Patents Act* (and also the relevant parts of the *Trade Practices Act* considered below).

In response to Ergas, the Australian Government has amended the *Patents Act* and adopted new practices as follows:

(a) Expand the publicly available information (the prior art) that an invention is compared against to determine whether it is novel and involves an inventive (or innovative) step (see *Patents Amendment Act 2001* (Cth) sch 1 (and sch 2); *Intellectual Property Laws Amendment Act 2003* (Cth) sch 2);

- (b) Introduced the 'balance or probabilities' evidence standard for patent examinations (Commonwealth of Australia 2001b, pp. 26974-26975; Commonwealth of Australia 2001c, p. 25639);
- (c) Applied a standard that each aspect of use be 'specific, substantial and credible' (IP Australia 2007, para [1.3.8.6.3]; *Australia-United States Free Trade Agreement* Art 17.9.13);
- (d) Implementing more steeply rising renewal fees over the term of a patent (*Patents Regulations 1991* (Cth) sch 7 (Part 2, item 211));
- (e) Required various patent searches to be disclosed with the application (*Patents Amendment Act 2001* (Cth) sch 1);
- (f) Introducing a 'grace period' for any information made publicly available by or with the consent of the applicant by publication or use within 12 months before the filing date of the complete application (*Patents Regulations 1991* (Cth) rr 2.2 and 2.3);
- (g) Clarified the 'prior use' defence to patent infringement (*Intellectual Property Laws Amendment Act 2006* (Cth) sch 5); and
- (h) Added a new ground of compulsory licensing, although in a different form to that recommended by Ergas (*Intellectual Property Laws Amendment Act 2006* (Cth) sch 8; see also Ergas 2000, p. 163).

Significantly, the Australian Government has not repealed ss 144-146 of the *Patents Act* dealing with contracting conduct that is also addressed by s 51(1) of the *Trade Practices Act* despite accepting this recommendation (see IP Australia 2001, p. 8). Further, the legislation amending the *Patents Act* appears to have been assessed by the Office of Best Practice Regulation (formerly the Office of Regulation Review) as adequately addressing the CPA requirements for proposed regulations.[10] This perhaps reflects the inability of the Australian Government to determine so far the

appropriate content of competition, and instead favour the process of analysis over the content of the analysis (see Council of Australian Governments 2006, attachment B (decision 1.2(a); see also Lawson and Hindmarsh 2007).

### 3. The justification for the partial *Trade Practices Act* exemption of the *Patents Act*

The objective of the current *Trade Practices Act* is to 'enhance the welfare of Australians through the promotion of competition and fair trading and provision for consumer protection' (s 2). This is achieved by restricting some forms of market conduct and market structures considered to be anti-competitive (Pts IIIA, IV and XIB), while allowing that prohibited conduct and structure if it can be justified to be in the 'public interest' (Pt VII).[11] This balances competition as an important means to achieving economic efficiency, rather than competition as an end in itself (Dawson 2003, p. 32; Skehill 1992, pp. 94-96), and targets particular horizontal, vertical and economic monopolisation practices that are likely to undermine that efficiency.[12] Thus, the *Trade Practices Act* 'is conducive to greater economic efficiency by the prohibition of anti-competitive conduct, but it is not creative of it' (Skehill 1992, p. 95).

The *Trade Practices Act*, however, does not generally define 'competition'. Instead relying either on prohibiting some conduct always considered to be anti-competitive (*per se* prohibitions), or prohibiting some other conduct and some market structures only when it has passed a threshold of 'substantially lessening competition' or a 'substantial degree of power in a market' (the misuse of market power) (Pt IV). These prohibitions are then relaxed for some dealings with patent protected products and processes, or the prohibitions are avoided by seeking an authorisation, notification or clearance. The *Trade Practices Act* also deals with some conduct and market structures, including patent related products and processes that are an integral but subsidiary service or facility in access to essential facilities and the telecommunications market, but these are not addressed in this chapter (see for a further articulation, Ergas 2000, pp. 214-215).

The *Trade Practices Act* has been subjected to considerable amendment. The measures specifically addressing intellectual property have only been subjected to

limited change. The effect of the current s 51 of the *Trade Practices Act* provision is to provide an exemption from Pt IV of the *Trade Practices Act* for certain conditions in a license or assignment contracts that 'relates to' the patent protected product or process, except misuse of market power (see ss 46 and 46A) and resale price maintenance (see s 48). Thus, the current s 51 of the *Trade Practices Act* convolutedly provides, in part:

- (1) In deciding whether a person has contravened this Part [IV], the following must be disregarded:
  - (a) anything specified in, and specifically authorised by:
    - (i) an Act (not including an Act relating to patents, ...); or
    - (ii) regulations made under such an Act.[13]

. . .

- (3) A contravention of a provision of this Part [IV] other than section 46, 46A or 48 shall not be taken to have been committed by reason of:
  - (a) the imposing of, or giving effect to, a condition of:
    - (i) a licence granted by the proprietor, licensee or owner of a patent, ... orby a person who has applied for a patent ...; or
    - (ii) an assignment of a patent, ... or of the right to apply for a patent ...; to the extent that the condition relates to:
    - (iii) the invention to which the patent or application for a patent relates or articles made by the use of that invention.

The exemption of some patent license and assignment contract conditions was reflected in earlier incarnations in the *Trade Practices Act 1965* (Cth) and *Restrictive Trade Practices Act 1971* (Cth), that in turn trace their origins to the *Restrictive Trade Practices Act 1956* (UK). The purpose of retaining a specific exemptions for some patent license and assignment conditions in the *Trade Practices Act* is uncertain, other than it 'removes doubts that the exemptions provided in relation to patents and other forms of industrial property are those provided in clause 51(3) and are not to be found under clause 51(1)(a)' (Explanatory Memorandum 1974, p. 13). Perhaps the provision was 'to prevent a perceived clash between the interests of intellectual property owners and competition law' because at the time of the *Trade Practices Act* enactment 'intellectual property laws were widely believed to confer on the owners of intellectual property a limited economic monopoly' (Ergas 2000, p. 206; see also Samuel 1999, p. 149). It's present purpose, however, appears to be:

... providing businesses with greater certainty when engaging in licensing and assignment activity. This greater certainty can help reduce the costs associated with compliance with trade practices law and encourage more licensing [and assignment] activity (Samuel 1999, p. 150; see also Ergas 2000, p. 211).

Unfortunately, the application of ss 51(1) and (3) of the *Trade Practices Act* remains uncertain.[14] This in part reflects its complex construction and the paucity of extrinsic materials and court decisions examining its possible meanings. Perhaps significantly, a literal construction means that (from Ergas Interim 2000, attachment 1):

- (a) The parenthesis in s 51(1)(a) clarifies that 'there is no general exemption to the operation of pt IV for things specified in, and authorised by, Commonwealth laws relating to patents';
- (b) Section 51(3) does not apply to conduct that is a misuse of market power (ss 46 and 46A) and resale price maintenance (s 48);
- (c) Section 51(3) does not include the license or assignment of future rights;
- (d) Section 51(3) does not deal with know how and confidential information relating to patent protected products and processes;
- (e) It is not clear whether s 51(3) applies to an entire assignment or a part only of the assignment; and
- (f) The s 51(3) exemption 'probably does not apply in respect of the intellectual property rights but it applies to the subject of the rights' so that it is the patent protected product or process that is being exempted by the provision.

The High Court's interpretation of this provision clarifies that some license and assignment activity is exempted from Pt IV of the *Trade Practices Act*, although the

scope of the exemption remains uncertain.[15] In *Transfield Pty Ltd v Arlo International Ltd* the High Court considered a 'best endeavours' clause that provided:

The Licensee covenants during the period of the Power Transmission Line Licence at all times to use its best endeavours in and towards the design fabrication installation and selling of the ARLO PTL pole throughout the licensed territory and to energetically promote and develop the greatest possible market for the ARLO PTL pole (p. 87).

The license agreement concerned the use of a patent protected process for the manufacture and erection of steel poles. Following Transfield Pty Ltd's (Transfield) contract with Arlo International Ltd (Arlo), Transfield had used Arlo's pole to construct a transmission line and encountered some technical difficulties (p. 88). In a subsequent tender for a transmission line Transfield had calculated its costs based on the using the Arlo pole, but had not expressly provided that it would use those poles (p. 88). During the tender discussions some doubts were expressed about the suitability of the Arlo pole and Transfield had 'overcome the apprehensions' by not pressing the use of the Arlo pole, but rather offering its own pole developed in reliance on some information provided by Arlo about its pole (p. 88). The tender was finally awarded to Transfield on the basis of using Transfield's pole (p. 88).

Arlo subsequently brought an action against Transfield claiming that it had not used its 'best endeavours' to promote the Arlo pole as required by the contract (p. 89). It was common ground that 'as the result of the use of the Transfield pole, the potential market for the Arlo pole in Australia was effectively destroyed'. The issue before the High Court was whether the 'best endeavours' clause confined Transfield to using *only* Arlo's pole, and in its defence Transfield argued the clause was either unlawful because s 45(1) of the *Trade Practices Act* prohibited a clause with the purpose, effect or likely effect of substantially lessening competition, or a prohibited term under s 112 of the *Patents Act 1952* (Cth) (p. 91). The trial judge and Court of Appeal had found that Transfield had not used its best endeavours as it was required to do according to the contract (p. 90), and that Arlo had lost a substantial share of market as a result of its pole not being used as it had intended by its contract (pp. 90 and 91). The High Court majority decided in favour of Arlo (pp. 92 (Barwick CJ), 97 (Stephen J), 103 (Mason J) and 109 (Wilson J), and 105 (Murphy J, dissenting)).

In essence, the decision probably reflects difficult facts and circumstances, and the judges' preference that Transfield should not escape its contractual obligations with significant consequences for Arlo by taking advantage of a defence based on the legalistic construction and application of a statute. Put another way, Transfield argued that the 'best endeavours' clause was unenforceable because it was outside the patent exemption in the *Trade Practices Act* with the effect that the exemption would allowed Transfield to escape its earlier contractual obligations:

In our opinion there is no warrant for the introduction of words of the kind contended for by the appellant to the plain unambiguous words of cl 7. It would be destructive of the whole purpose of the licensing agreement if the licensee were at liberty to promote some other pole, if it or somebody else formed the opinion that the other pole was more suitable for a projected use (p. 90).

In the High Court's decision, Justice Mason supported a wide construction of the term 'relates to' in s 51(3) of the *Trade Practices Act* recognising the provision allowed a patentee to impose conditions on the license or assignment of the patent 'to protect the patentee's legal monopoly' (p. 103), but then said, 'conditions which seek to gain advantages collateral to the patent are not covered by s 51(3)' of the *Trade Practices Act* (p. 103). Chief Justice Barwick considered the condition in question was entirely within s 51(1) of the *Trade Practices Act* and attracted the exemption but did not give detailed reasons for this conclusion (p. 92). Justice Wilson considered the clause fell 'squarely within' s 51(3) of the *Trade Practices Act* exemption but did not give detailed reasons for this conclusion (p. 108). Justice Stephen considered there was no evidence the condition, read either alone or in combination with other provisions of the license, had either the purpose or effect of substantially lessening competition (p. 97), and Justice Murphy decided the matter on the basis of the *Patents Act 1952* (Cth) (p. 105).

The key question in considering s 51(3) of the *Trade Practices Act* is if the limited patent exemption was repealed, what conduct would be subject to Pt IV of the *Trade Practices Act* that was previously exempted? This in part will depend on the interpretation given to the term 'relates to' as it appears in the *Trade Practices Act*:

- (a) Narrow view a license or assignment condition relates to the patent protected product if it relates directly to the goods produced (Samuel 1999, p. 184; Ergas 2000, p. 207);
- (b) Intermediate view a license or assignment condition relates to the patent protected product if it seeks to protect the patentee's exclusive rights or secure an advantage that is not collateral to the patentee's exclusive rights (Ergas 2000, p. 207);[16] or
- (c) Broad view a license or assignment condition relates to the patent protected product unless it seeks to apply to an almost entirely unrelated transaction or arrangement (Samuel 1999, p. 184; Ergas 2000, p. 207).

Despite the broad ranging reviews of the *Trade Practices Act*, only very few reviews have actually examined the operation of s 51(3) of the Trade Practices Act (Weisbrot 2004, pp. 555-580; Dawson 2003, p. 86; Ergas 2000, pp. 202-215; Samuel 1999, pp. 149-246; Hilmer 1993, pp. 149-151; Stonier 1984, pp. 22-26). Of particular significance, Ergas, as part of its broader assessment of the *Patents Act* under the CPA (discussed above), examined the recommendations of the earlier Samuel (1999) report (Ergas 2000, pp. 202-215). The Terms of Reference *only* required Ergas to 'have regard to ... the conclusions and recommendations' of the Samuel (1999) report. In addressing the Terms of Reference Ergas carefully confined its comments to the existing legislative scheme 'considering the effects that (given the [Trade Practices Act as it stands) would flow from different approaches to the coverage by the Act of conduct relating to the exercise of [intellectual property] rights' (Ergas 2000, p. 210). Further, Ergas carefully noted that the Trade Practices Act was fashioned in a different economic era and probably should be subjected to its own independent review, whereupon the place of patent privileges might be more certainly addressed (see Ergas 2000, pp. 209-210). With these riders in place Ergas recommended that the Trade Practices Act should be amended further narrowing the existing exemption by applying a test of whether the relevant conditions in licenses and assignments substantially lessened competition as it is applied in other parts of that *Trade* Practices Act (Ergas 2000, pp. 11 and 215; including a refusal to deal, p. 213).

The Ergas's view appears to have been that the *Trade Practices Act* 'should come into play when intellectual property rights are used in ways that go beyond the scope of the right being granted' (Ergas 2000, p. 24) – the so-called 'scope of grant' doctrine derived from the 'inherency' doctrine in the United States (see generally Carrier 2002, pp. 788-791; Stedman 1973, p. 595; Buxbaum 1965, pp. 641-645). The consequence of this view appears to have been that the exercise and transfer of patent privileges was therefore an acceptable restriction on competition so long as exercising the patent privileges was not 'going beyond market power' (Ergas 2000, p. 211):

The Committee recognises that the IP legislation confers upon the intellectual property right holder a series of exclusive privileges designed to promote innovation. Given that these rights are conferred by legislation, they should be able to be effectively exercised even when this involves (as it generally must) the exclusion of others. However, these rights should not be capable of being used to *go beyond* the market power those rights directly confer. That is, the right holder should not be allowed to extend the statutory right into a wider right of exclusion with the effect of substantially lessening competition (emphasis in original) (Ergas 2000, p. 211).

Ergas received a number of submissions advocating that the existing *Trade Practices Act* provision should be retained because of 'the importance which Australian industry and research institutes attach to the operation of s 51(3)' of the *Trade Practices Act*, 'the need to protect exclusive licensing arrangements, such as those underpinning the operation of CRCs [government funded research institutions]' and 'the need for certainty in intellectual property licensing' (Ergas 2000, pp. 207-208). Perhaps surprisingly, Ergas noted that '[s]omewhat paradoxically, submitters typically admitted that the precise meaning of s 51(3) [of the *Trade Practices Act*] was highly uncertain, and yet they asserted that it had provided a firm basis for major investment decisions' (Ergas 2000, p. 208). Despite this 'paradox', and the carefully riders about the *Trade Practices Act* being a competition law reflecting the times of its origins (Ergas 2000, p. 210), Ergas appeared to consider that transaction costs pose a special barrier to the 'efficient use of intellectual property' compared to 'other property or assets' (Ergas 2000, p. 210), and as a consequence:

... this means that it is essential that firms have the scope to enter into efficient contracts that involve intellectual property rights, free of onerous and ultimately counter-productive regulatory

burdens. Great caution is therefore needed in imposing on transactions in IP rights constraints that may be less costly when applied in other areas of property (Ergas 2000, p. 211).

Despite its reservations about the drafting of s 51(3) of the *Trade Practices Act*, Ergas rejected simply repealing the provision because of theoretical efficiency gains from some of the conduct prohibited by Pt IV of the *Trade Practices Act* and the uncertainty about the effects of a repeal on licensing and assignment decisions (Ergas 2000, p. 212). The 'central question' for Ergas was 'whether the current s 51(3) [of the *Trade Practices Act*] strikes an appropriate balance in allowing the exercise of the rights but not their use in ways that go beyond the purposes underlying the rights?' (Ergas 2000, p. 212).

While Ergas was uncertain about 'what content would be left in [s 51(3) of the *Trade Practices Act*] if (in line with the [Samuel (1999)] recommendations) all horizontal arrangements and all price and quantity restrictions were removed from its scope' (Ergas 2000, p. 213), they 'believ[ed] that adoption of the [Samuel (1999)] proposal would amount to a repeal of the section' (Ergas 2000, p. 213). The consequence was to 'impose unnecessary costs on the innovation process' (Ergas 2000, p. 213). The solution that balanced the needs of the intellectual property system and the wider goals of competition policy, in Ergas's 'view', 'requires a careful re-framing of the section' (Ergas 2000, p. 213):

... we believe this balance can best be addressed through the following changes:

- repealing s 51(3) and related provisions from the [Trade Practices Act];
- ...; and
- including amendments in the [Trade Practices Act] to ensure that a contravention of Pt IV of the [Trade Practices Act], or of s 4D of that Act, shall not be taken to have been committed by reason of the imposing of conditions in a licence, or the inclusion of conditions in a contract, arrangement or understanding, that relate to the subject matter of that intellectual property statute, so long as those conditions do not result, or are not likely to result, in a substantial lessening of competition (Ergas 2000, pp. 213 and 215).

### Ergas also considered that:

The Committee also notes that the imposing of conditions in a licence, or the inclusion of conditions in a contract, arrangement or understanding, should also clearly mean the refusal by

the owner of an [intellectual property] right to enter into a licence, contract, arrangement or understanding. This means that the intellectual property owner still has the benefit of the relevant provisions even in the absence of a contract. However, this will not over-ride separate provisions made in the IP legislation that bear on compulsory licensing (Ergas 2000, p. 213).

To assist 'the users of the [intellectual property] system to better understand the proposed changes' Ergas considered the Australian Competition and Consumer Commission (ACCC) should issue guidelines 'on how it will implement enforcement activities related to the provision' (Ergas 2000, pp. 19 and 215). The purpose of these guidelines would be to 'provide sufficient guidance to owners of intellectual property rights as to the types of behaviour likely to result in a substantial lessening of competition' and 'make provisions for potential contractors to seek written clearance from the ACCC on whether the proposed behaviour is likely to result in a substantial lessening of competition' (Ergas 2000, pp. 19 and 215). The results of these changes would:

... ensure that conduct relating to the subject matter of IP rights, which does not result in a substantial lessening of competition, would be exempt from the relevant provisions of the [*Trade Practices Act*]. It would accept that conduct from the Act's *per se* prohibitions, thus minimising the range of instances in which administrative procedures such as authorisation or notification were required (Ergas 2000, p. 214).

Ergas apparent consideration that the *Trade Practices Act* 'should come into play when [patents] are used in ways that go beyond the scope of the right being granted' (Ergas 2000, p. 24) failed to assess whether a patent privilege is an acceptable restriction on competition even though there has been no substantial lessening of competition (such as the *per se* prohibitions that do not have the purpose, effect or likely effect of substantially lessening competition). Their justification for this conclusion appears to be:

... it seems reasonable to suppose that the *per se* prohibitions embodies in the [*Trade Practices Act*], 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. Over the longer term, this could both reduce innovation and distort competition between those (typically smaller and more specialised) firms that depended on licenses and assignments and those that did not (Ergas 2000, p. 212).

The major criticism of this 'scope of grant' approach is that it resolves the interface between patents and competition law by favouring patents, with an inherent assumption that the welfare increases from patents will always outperform the welfare increases from enhanced competition (see, for example, Carrier 2002, p. 764). Unfortunately, Ergas provided no further analysis of what exempted *per se* prohibited conduct was socially detrimental (or its consequences), while assuming that any detrimental conduct would be outweighed by beneficial conduct because of the vulnerability of licensing practices to uncertainty and transaction costs (see Ergas 2000, pp. 210-211; Eagles and Longdin 2003, p. 35). If, however, Ergas was really only concerned about certainty and transaction costs, then there are arguably better ways of addressing this than an exemption from competition laws (see, for example, Hilmer 1993, pp. 88-89 suggesting direct subsidies, tax breaks, and so on), but none of these were addressed.

Following these various reviews the Australian Government has responded (see IP Australia 2001; Treasury 2003). The responses, in dealing with the *Trade Practices Act* exemptions for patents, are to:

- (a) Continue to accorded distinctive treatment to patents (and some other forms of intellectual property) under the *Trade Practices Act* (IP Australia 2001, p. 11), but not know how, confidential information or data protection;
- (b) Include transitional arrangements to preserve the effect of the existing licences and assignments entered into before the proposed amendments (IP Australia 2001, p. 12);
- (c) Maintain the separate treatment of ss 46, 46A or 48 of the *Trade Practices Act* (misuse of market power and resale price maintenance) in dealing with any exemptions to the *Trade Practices Act* (IP Australia 2001, p. 12);
- (d) Limit patent license (and presumably assignment) so that 'IP licensing would be subject to the provisions of Pt IV [of the *Trade Practices Act*], but a contravention of the *per se* prohibitions (ss 45, 45A and 47, or of s 4D), would

- instead be subject to a substantial lessening of competition test' (IP Australia 2001, p. 12); and
- (e) Require the ACCC to issue guidelines 'outlining its enforcement approach to these provisions' so that the guidelines 'outline when IP licensing and assignment conditions might be exempted under s 51(3) [of the *Trade Practices Act*], when IP licences and assignments might breach Pt IV ..., and when conduct that is likely to breach Pt IV ... might be authorised' (IP Australia 2001, p. 12; see also Treasury 2003, p. 5).

In dealing with the *Trade Practices Act* generally, the Australian Government proposes to:

- (a) Support the development of guidelines by the ACCC about the application of Pt IV of the *Trade Practices Act* to intellectual property (Treasury 2003, p. 5) and joint ventures (often involving intellectual property) (Treasury 2003, p. 9);
- (b) Restrict the *per se* prohibition against exclusionary provisions by establishing a competition defence that the provision does not have the purpose, effect or likely effect of substantially lessening competition, and confine the reach of the prohibition 'to those agreements that target competitors, actual or potential, of the parties to the agreement' (Treasury 2003, pp. 7-8);
- (c) Remove the prohibition *per se* against third-line forcing, and instead prohibit third-line forcing only if it has the purpose, effect or likely effect of substantially lessening competition (Treasury 2003, p. 8);
- (d) Modify by amendment the limits on exemptions for joint ventures from the *per se* prohibition against exclusionary provisions and price fixing (Treasury 2003, p. 8); and
- (e) Introduce by amendment a time limit of six months for the consideration of non-merger applications for authorisation by the ACCC, and include

discretion to waive, in whole or in part, the fee for filing a non-merger application for authorisation (Treasury 2003, p. 6).

The various Australian Government responses indicated that the uncertain s 51(3) of the *Trade Practices Act* exemption will be limited further, although the precise formulation of the exemption remains unclear.[17] It appears that the exempted conduct that s 51(3) of the *Trade Practices Act* will allow will be conditions in licenses and assignments that 'relates to' the patent protected products and processes that would have been characterised as *per se* prohibitions, or that have the purpose, effect or likely effect of substantially lessening competition. These include for examples:

- (a) Price fixing (*per se*) s 45A(1) of the *Trade Practices Act* deems price fixing (price, discount, allowance, rebate or credit) contracts, arrangements or understandings to have the purpose, effect or likely effect of substantially lessening competition. The consequence is that price fixing is prohibited *per se* under ss 45(2)(a)(ii) and (2)(b)(ii) of the *Trade Practices Act* that proscribe the making or giving effect to a provision in a contract, arrangement or understanding that has the purpose, effect or likely effect of substantially lessening competition;
- (b) Exclusionary conduct (per se) ss 45(2)(a)(i) and (2)(b)(i) of the Trade Practices Act proscribe the making or giving effect to an exclusionary provision in a contract, arrangement or understanding, being defined in s 4D of the Trade Practices Act as a contract, arrangement or understanding made between competitors which has the purpose of preventing, restricting or limiting the supply or acquisition of goods or services to or from particular persons or classes of persons either altogether or in particular circumstances or on particular conditions;
- (c) Covenants that fix prices (*per se*) s 45C(1) of the *Trade Practices Act* provides that in applying the restrictions on covenants (as defined in s 4) that fix prices in s 45B(1) of the *Trade Practices Act*, the substantially lessening competition requirement is 'omitted' so that a covenant is unenforceable 'in so

far as it confers rights or benefits or imposes duties or obligations on a corporation or on a person associated with a corporation' (*Trade Practices Act* s 45B(1)); and

(d) Third line forcing (*per se*) – s 47(6) and (7) of the *Trade Practices Act* provides that the supply, offer to supply or price (including a discount, allowance, rebate or credit) of goods or services tied to acquiring goods or services of a particular kind or description directly or indirectly from another person is prohibited exclusive dealing according to s 47(1) of the *Trade Practices Act*.

These prohibitions may, however, be allowed where they have been authorised (s 88), cleared (s 95AC), or notified (in the case of some exclusive dealings) (s 93(1)). While the Australian Government has promised guidelines on the operation of the *Trade Practices Act* in respect of intellectual property (Treasury 2003, pp. 5 and 9), these remain outstanding with the 'in force' guidelines issued in 1991 (Trade Practices Commission 1991). The issues of certainty and transaction costs have not been addressed further by the Australian Government.

### 4. Conclusions

The policy objective set out in the CPA is to promote competition by removing unjustified restrictions on competition in Australia (*Competition Principles Agreement* cl 5(1)). For statute based intellectual property laws the Hilmer report expressed clear concern that these regulations potentially created barriers to entry that might restrict competition (see Hilmer 1993, p. 195), and that the need for exemptions for certain license and assignment conditions from the *Trade Practices Act* were uncertain (Hilmer 1993, p. 150). This chapter has examined the Ergas legislation reviews addressing patent privileges set out in the *Patents Act* and *Trade Practices Act* to assess the foundation evidence that might satisfy the requirements of the CPA. These analyses show important controversial issues have been glossed over, even though such an approach was open to Ergas. Thus, a detailed competition analysis of the patent privileges set out in the *Patents Act* and their exercise according to the *Trade Practices Act* has been avoided.

Perhaps the most revealing part of the Hilmer report was the recognition that '[r]egulation that confers benefits on particular groups soon builds a constituency with an interest in resisting change and avoiding rigorous and independent re-evaluation of whether the restriction remains justified in the public interest' (Hilmer 1993, p. 191). To address this particular constituency problem, the Hilmer report recommended that the onus of proving that the restriction on competition was justifiable should change from those advocating change to those advocating that the restriction on competition remain in place, or be imposed (Hilmer 1993, p. 190). This was carried through to the CPA (Competition Principles Agreement cl 5(1)), although it does not appear to have featured in Ergas's review of patents. In contrast, the Ergas's majority's approach to parallel importing under the Copyright Act 1968 (Cth) expressly adopted this requirement (see Ergas 2000, p. 61). This suggests that a different approach and focus has significant potential to improve the assessment of patent privileges, and might be a guide to expanding the scope of analysis applied to the *Patents Act* and the *Trade* Practices Act in future reviews. Without applying the CPA's analytical approach and taking into account the outcomes of applying the CPA's analytical approach a good opportunity to deliver better quality and better performing regulations has probably been passed over. To illustrate this contention further, a critique of Ergas's dealing with the Trade Practices Act was set out.

Generally patent licensing and assignment arrangements might be expected to be procompetitive through exploiting the patent protected product or process and incorporating more economically efficient manufacturing and distribution facilities, workforces, other intellectual property, other transaction costs, other complementary factors of production, and so on, that might not be available to the patent privilege holder alone, or otherwise require expensive (and inefficient) duplication (see, for example, United States Department of Justice and Federal Trade Commission 1995, pp. 5 and 16; Federal Trade Commission 1996, pp. 213-215). However, not all licenses and assignments will achieve these desirable efficiency outcomes. The challenge for Pt IV the *Trade Practices Act* is to make these distinctions and provide 'a set of rules intended to ensure the competitive process is not undermined by the anti-competitive behaviour of firms' (Hilmer 1993, p. 25). However, as the analysis in this chapter shows, there has been a failure to address in any detail the interface between patents and competition law, and whether license and assignment dealings

with patent protected products and processes should be treated any differently to other contracts, arrangements or understandings under Pt IV of the *Trade Practices Act*. This is important as the Hilmer report stated:

There are compelling efficiency and equity arguments for ensuring that competitive conduct rules ... are applied uniformly and universally throughout the economy, with exemptions or special treatment accorded only on demonstrated public interest grounds (Hilmer 1993, p. 85; see also Trade Practices Act Review Committee 1976, p. 84; *Competition Principles Agreement* cl 5(1)).

Ergas, and earlier Samuel, accepted the need for the *Trade Practices Act* to provide some exemptions for intellectual property (Samuel 1999, p. 213; Ergas 2000, pp. 11 and 215 (including a refusal to deal: p. 213)). Unfortunately, neither Ergas nor Samuel in the end clearly articulated the 'public interest' justifying the recommended limited exemption for intellectual property.[18] While Samuel raised a range of counter arguments to challenge the exemptions from the *Trade Practices Act* (see Samuel 1999, pp. 196-200), the effect of Samuel's recommendations were passed over by Ergas and its assessment that expressly rejected the earlier recommendations (see Ergas 2000, p. 213).

Ergas did recommend a theoretically substantial reduction in the scope of the current exemption for some conditions in licenses and assignments from Pt IV of the *Trade Practices Act* where there was a 'substantial lessening of competition'. Although the practical effect is uncertain as the 'market' definition required by the substantially lessens competition test is unlikely to ever capture many license and assignment conditions, either because the intellectual property privilege is unlikely to define a market alone, the market being much broader so that exercising a privilege in that broader market is unlikely to 'substantially lessen competition' (see, for example, Adams and McLennan 2002, p. 13), or the exercise of the privilege will not be characterised in a way that is an exercise of market power (see, for example, Lawson 2002, pp. 117-120). Ergas did not, however, provide a detailed competition analysis or assessment of why exemption from the *per se* prohibitions in the *Trade Practices Act* that did not have the purpose, effect or likely effect of substantially lessening competition were justified (Ergas 2000, pp. 213-214). This was a surprising result as their express task according to their Terms of Reference was to subject the existing

statutory arrangements to the competition standard set out in the CPA (Ergas 2000, pp. 216-217). In the present context, this is a requirement to *demonstrate* that the benefits of the legislated restriction on competition (the exemption from Pt IV of the *Trade Practices Act*) outweigh the costs and that the objectives of patent privileges can only be achieved by restricting competition (see *Competition Principles Agreement* cl 5(1)). While there are practical difficulties in applying the CPA in determining exactly what standard and threshold to apply in assessing costs and benefits, it is undertaking the process of analysis that is likely to deliver better regulation by 'questioning, understanding real world impacts, [and] exploring assumptions' (Industry Commission 1996, p. 11; Productivity Commission 2005a, p. 140).

Even if, as Ergas seems to have believed, transaction costs (such as webs of crosslicenses) pose a special barrier to the 'efficient use of intellectual property' compared to 'other property or assets' (Ergas 2000, p. 210), there was merely an assertion that contracts involving intellectual property faced 'counter-productive regulatory burdens' (Ergas 2000, p. 210). There was no assessment of the costs and benefits of lowering the transaction costs by accepting likely anti-competitive licensing and assignment practices, or the potential for other arrangements to lower those transaction costs that did not involve restricting competition.[19] Further, Ergas merely alluded to concerns about the role of Pt IV of the Trade Practices Act and its design in an 'intellectual climate ... [where] ... most participants in the policy debate would have reasonably assumed that many practices that involved tying, bundling, price discrimination or resale price maintenance' were anti-competitive without setting out its reasoned justification (Ergas 2000, p. 209). This concern might explain Ergas's reluctance to recommend amendment to the wider provisions of Pt IV of the Trade Practices Act (see Eagles and Longdin 2003, pp. 34-35). However, important conclusions about the hotly contested theoretical preferences for balancing intellectual property, and patents in particular, and competition law were left un-stated, [20] and then the recommendations retained the uncertain 'relates to' threshold (see Ergas 2000, p. 215) perpetuating the potential for inefficiencies from business uncertainty and increased transaction costs in seeking some certainty that the exemption might apply.

To assist in understanding its recommendations, Ergas assigned the task to the ACCC to issue guidelines about how it might enforce the proposed changes (see Ergas 2000, pp. 213 and 215). Unfortunately this will not assist greatly as the proposed guidelines are merely administrative and enforcement guidelines that do not bind courts, and avoid the possibility of a regime of rules truly 'nuanced' to the special needs of intellectual property (if indeed those needs are special) that Ergas found so problematic with the 1970s era Pt IV of the Trade Practices Act prohibitions (see Ergas 2000, pp. 209-210). For example, other creative solutions that Ergas might have considered was a bloc exemption for dealings involving intellectual property under modified authorisation and notification arrangements, or created under a modified s 172 of the *Trade Practices Act* regulations power. The content of such a bloc exemption would undoubtedly have proved contentious and necessitated Ergas to commit to a perspective about the most efficient and effective way to regulate the interface between intellectual property and competition law.[21] While this is no easy task, as the European experience demonstrates (see, for example, Kallaugher and Weitbrecht 2005; Carlin and Pautke 2004), it is a necessary step in a long road to better understanding and capturing the benefits from innovation through balancing the patents and competition law schemes.[22] Further, such an approach might address the different needs of different industries and technologies that rely on patents for different purposes (see, for example, Burk and Lemley 2003), the different strategic uses of patents (see, for example, Parchomovsky and Wagner 2005), and where patents and competition laws are likely to significantly affect levels of beneficial innovation particularly when comparing industries with low cost R&D (such as software developments), incremental or cumulative innovations (such as semiconductors) and high duplication costs (such as pharmaceuticals) (see, for example, Federal Trade Commission 2002, pp. 34-43; see generally Federal Trade Commission 2007). Another vexed area that probably deserved further attention is the potential for anti-competitive settlements of patent disputes (see, for example, Hovenkamp, Lemley and Janis 2003).

The key question then, is why should *per se* prohibitions and others that have the purpose, effect or likely effect of substantially lessening competition be allowed for some patent licenses and assignments, but not other contracts (and arrangements and

understandings)? This is particularly important because of the rationale for *per se* prohibitions in the *Trade Practices Act*:

... that the conduct prohibited is so likely to be detrimental to economic welfare, and so unlikely to be beneficial, that it should be proscribed without further inquiry about its impact on competition (Dawson 2003, p. 123).

There is no doubt that some licenses and assignments that include conditions that fall within the bounds of the *Trade Practices Act*'s *per se* prohibitions that do not have the purpose, effect or likely effect of substantially lessening competition are procompetitive (see Samuel 1999, p. 211; Ergas 2000, pp. 209-210). The challenge for the *Trade Practices Act* remains to distinguish between pro-competitive and anticompetitive arrangements. Sadly, the flurry of reviews including Ergas, and the Australian Government responses, have carefully avoided any in-depth analysis of the actual licensing and assigning practices that inhabit the interface between patents and competition laws, and have achieved very little in clarifying this interface. Perhaps most disappointingly, the two key issues that require resolution remain unanswered:

- (a) The so-called 'paradox': why the current s 51(3) of the *Trade Practices Act* exemption remains so apparently important when its exact meaning remains so uncertain? (see Ergas 2000, p. 208); and
- (b) Given the global nature of intellectual property licensing and assignments, and patent licensing and assignments in particular, why is there a need for favourable treatment in Australia when favourable treatment in one jurisdiction may not apply in another jurisdiction? (see Samuel 1999, p. 200).

While there is unlikely to ever be a complete resolution to the tension between patents and competition law, the failure of recent reviews, and particularly Ergas, and proposed legislative activity has been another lost opportunity to assess and develop better quality and performing regulation in Australia (see also see Stonier 1984, p. 80). Perhaps Australia's contribution to this debate is to illustrate the 'exceptionalism' granted to patents over broader competition concerns, and the ongoing failure to

grapple with critical competition issues at the interface between patents and competition laws. The first steps in remedying the relationship between patents and competition, therefore, must be a genuine and critical analysis of patenting (under the *Patents Act* and *Trade Practices Act*) according to the CPA's methodology.

#### **Notes**

- 1. Notably, patent privileges have been likened to other forms of property, but clearly recognizing that the 'bundle of rights' associated with patent privileges may not be the same as other forms of property: see, for example, United States Department of Justice and the Federal Trade Commission 1995, p. 3. Although contrast this with the Ergas 'assumption' that '... intellectual property is comparable to other forms of property, so that ownership provides the same rights and responsibilities': Ergas 2000, p. 26.
- 2. Noting that 'while some intellectual property rights may in fact give their owner power in an economically relevant product market, most do not; they merely prevent others from competing to sell copies of a particular product, not from selling different products that compete with the original': Lemley 1997, p. 996. See also United States Department of Justice and the Federal Trade Commission 1995, p. 7; Adams and McLennan 2002, pp. 11-12 listing the 'perceived conflicts' as being market power, competition time-frame (short-term or long-term allocation efficiency), distinctive economics of intellectual property (low marginal costs and ease of appropriation) and whether intellectual property licensing imposes vertical or horizontal restraints. See also Fung 1998, pp. 777-780.
- 3. Essentially, *Patents Act* patent privileges are a utilitarian approach with the prospect of patent privileges being an inducement to further innovation and creativity balanced against the restrictions on competition through high prices resulting in inefficiently low uses, inefficiently strong incentives to avoid inventing around the prior art, inefficiently low incentives to improve on or invent around the prior art, and use of resources that might otherwise be used for efficient purposes to enforce the patent privileges: see Cohen and Noll 2001, p. 459.

- 4. Noting that the economics of intellectual property is also highly contested: compare for example, Kitch 2000, pp. 1734-1735 and Landes and Posner 2003, pp. 375-377. See generally Carrier 2002, pp. 766-800.
- 5. For example, while theoretical economic analysis posits a finite socially optimal patent life that depends on the private cost-benefit ratios of the particular invention, this cannot be determined in practice and as a consequence the duration of statutory privilege has arbitrarily been chosen at 20 years. For a popular theoretical analysis see Scherer 1972. But note that the hypothesis that patent protection results in higher levels of economic development and greater expenditure on research and development may also be questionable: see Ginarte and Park 1997.
- 6. The foundation document of the current government innovation policy, Backing Australia's Ability, as it was articulated in 2001, only sought to 'strengthen our intellectual property (IP) management processes and increase access to global research and technologies' (Commonwealth of Australia 2001a, p. 18) and makes no mention that this be achieved through a scheme that creates more certain or more comprehensive privileges for inventors. However, by 2002 the implementation of Backing Australia's Ability involved enhancing the privileges of patent holders, based on the conclusion that a '[s]ound intellectual property (IP) protection and management are both critical for a successful innovation system' and a need for 'fundamental changes to the patent system, to provide better protection and meet the needs of those using our IP regulatory regime' (Commonwealth of Australia 2002, p. 14). Thus, Backing Australia's Ability had evolved to offer a 'range of IP initiatives that strengthen our ability to protect our ideas and better capture returns from commercialisation' (Commonwealth of Australia 2002, p. 14).
- 7. Notably, this task still remains to be completed: see National Competition
  Council 2005, p 34. In addition to these measures, CoAG has also agreed to
  specific measures for national standard setting and regulatory action by
  Ministerial Councils and standard-setting bodies: see Council of Australian
  Governments 2004a. See also Council of Australian Governments 2004b.
  While there are some differences between the form and content of the CPA
  and other CoAG national standard setting and regulatory action arrangements,
  both impose a similar analytical approach for examining existing and proposed

- regulations: see Productivity Commission 2004, pp 69-73. See also Productivity Commission 2005b.
- 8. Such assumptions are certainly open to question, especially where a state is a net technology importer like Australia: see, for example, Maskus 2000, pp. 237-238.
- 9. Unfortunately Ergas did not provide any support for this assertion. This is significant as the availability of alternative, substitute and imitated products and processes might be expected to *discourage* those seeking patent protection (with its attendant expenses, delays, and so on) and seek alternatives, such as trade secrets, and so on, which did not seem to be a concern expressed by those making submissions to the committee.
- 10. See Productivity Commission 2001, pp. 30-31 or Productivity Commission 2002, pp. 28-29 (*Patents Amendment Act 2001* (Cth)); Productivity Commission 2003, pp. 35-36 or Productivity Commission 2004, p. 40 (*Intellectual Property Laws Amendment Act 2003* (Cth)); Office of Best Practice Regulation 2007b, p. 55 (*Intellectual Property Laws Amendment Act 2006* (Cth)). Notably, the outcomes for 2006-2007 have not yet been released, although it is expected that the *Patents Act* amendments will be found to have been compliant.
- 11. For example, the 'public interest' is generally determined for authorizations after assessing the allocation, production and dynamic efficiencies, all with a social perspective and a substantiated public benefit: Australian Competition and Consumer Commission 1995, pp. 19-22.
- 12. While the original *Trade Practices Act* and accompanying extrinsic materials provided no coherent policy objective, the *Competition Policy Reform Act* 1995 (Cth) s 3 that amended the *Trade Practices Act* articulating the objective to promote competition (and consumer protection) to 'enhance the welfare of Australians' (*Trade Practices Act* s 2), and this presumably reflected the Hilmer report's understanding of 'competition policy' as 'not about the pursuit of competition for its own sake. Rather, it seeks to facilitate effective competition in the interests of economic efficiency while accommodating situations where competition does not achieve economic efficiency or conflicts with other social objectives': Hilmer 1993, p. 6. Although there are other views: see, for example, Pitofsky 1979.

- 13. Noting that *Trade Practices Act* s 51(1C) provides that '[t]he operation of subsection (1) is subject to the following limitations: (a) in order for something to be regarded as specifically authorised for the purposes of subsection (1) the authorising provision must expressly refer to this Act'. This provision was introduced by the *Competition Policy Reform Act 1995* (Cth) s 15.
- 14. The structure, interpretation and application of the exemption have been widely considered. See, for recent examples, Nielsen 2004, pp. 188-189; Oddie and Eyers 2004, pp. 12-13; Weisbrot 2004, pp. 567-569; Eagles and Longdin 2003, pp. 29-32. See also Lindgren 2005.
- 15. This point has been made in a number of articles. See, for recent examples, Nielsen 2004, p. 191; Eagles and Longdin 2003, p. 29; Adams and McLennan 2002, p. 12. Notably a number of cases considering *Trade Practices Act* pt IV arguments about intellectual property have not relied on s 51(3) to reach their decision: see, for examples, *Broderbund Software Inc v Computermate Products (Australia) Pty Ltd; Universal Music Australia Pty Ltd v Australian Competition and Consumer Commission.*
- 16. This was also the view that was adopted by the Trade Practices Commission, such that, 'if there is any doubt whether a condition relates to the subject matter of a license, the purpose and scope of the exclusive rights granted by the ... [patent] ... will be considered to determine whether a collateral advantage has been achieved by the condition': Trade Practices Commission 1991, p. 13.
- 17. Some of the ancillary measures were addressed in the *Trade Practices*Legislation Amendment Bill (No 1) 2005 (Cth). For example, sch 7 (cl 3) introduced a substantial lessening of competition test for third line forcing that was previously a *per se* prohibition, although this proposal was not effected by the final amendments: see Commonwealth of Australia 2005, p. 138.
- 18. This concern is particularly compelling in the case of Samuel (1999) as it's draft report had recommended that s 51(3) of the *Trade Practice Act* be repealed, although the final report reversed this position without any explanation: National Competition Council 1998a, pp. v-vii; National Competition Council 1998b, pp. 22-30.

- 19. Noting that the Hilmer report considered that there were likely to be few instances where other government policy instruments might not be available to pursue a particular economic or social objective, and that anti-competitive conduct was often more inefficient than other options, such as direct and transparent budgetary assistance: Hilmer 1993, pp. 88-89.
- 20. For example, the 'grab' for jurisdiction of antitrust matters through patent disputes by the United States Federal Circuit Court of Appeals and its abandonment of precedent from other jurisdictions perhaps reflecting different ideological perspectives about the prominence of efficiency in a competition analysis: see generally Gambrell 2000. Noting the criticism of some court decision and their possible consequences see Pitofsky 2001. For an example of the contested positions compare Kitch 2000, and Landes and Posner 2003, pp. 375-377.
- 21. For an overview of some of the possible approaches open to Ergas see Carrier 2002, pp. 766-800.
- 22. This view is reflected in the ongoing discussions in the United States about the appropriate balance between patents and competition laws requiring changes to both the patent and competition laws to stimulate innovation for the benefit of consumer welfare: see generally Federal Trade Commission 2003; Federal Trade Commission 2007.

### References

- Adams, G. and D. McLennan (2002), 'Intellectual Property Licensing and Pt IV of the Trade Practices Act: Are the TPA's pro-competitive provisions anti-IP commercialization?', *Intellectual Property Forum*, 51, 10-31.
- Australian Competition and Consumer Commission (1995), *Guide to Authorisations* and *Notifications*, Canberra: Australian Government Publishing Service.
- Boldrin, M. and D. Levine (2004), 'The Case Against Intellectual Monopoly', *International Economic Review*, 45(2), 327-350.
- Bowman, W. (1973), *Patent and Antitrust Law: A Legal and Economic Appraisal*, Chicago: University of. Chicago Press.
- Broderbund Software Inc v Computermate Products (Australia) Pty Ltd (1991) 22 IPR 215 (Beaumont J).

- Burk, D. and M. Lemley (2003), 'Policy Levers in Patent Law', *Virginia Law Review*, 89(7), 1575-1696.
- Buxbaum, R. (1965), 'Restrictions Inherent in the Patent Monopoly: A Comparative Critique', *University of Pennsylvania Law Review*, 113(5), 633-667.
- Carlin, F. and S. Pautke (2004), 'The Last of its Kind: The Review of the Technology Transfer Block Exemption Regulation', *Northwestern Journal of International Law and Business*, 24(3), 601-618.
- Carrier, M. (2002), 'Unraveling the Patent-Antitrust Paradox', *University of Pennsylvania Law Review*, 150(3): 761-854.
- Centre for International Economics (1999), *Guidelines for NCP Legislation Reviews*, Canberra: Centre for International Economics.
- Cohen, L. and R. Noll (2001), 'Intellectual Property, Anti-trust and the New Economy', *University of Pittsburgh Law Review*, 62(3), 453-473.
- Commonwealth of Australia (2001a), *Backing Australia's Ability: An Innovation Action Plan for the Future* Canberra: Big Island Graphics and Corporate Communications ISR.
- Commonwealth of Australia (2001b), *Parliamentary Debates*, House of Representatives, 24 May 2001, pp. 26974-26975 (Parliamentary Secretary to the Minister for Industry, Science and Resources).
- Commonwealth of Australia (2001c), *Parliamentary Debates*, Senate, 6 August 2001, p. 25639 (Parliamentary Secretary to the Minister for Health and Aged Care).
- Commonwealth of Australia (2002), *Backing Australia's Ability: Real Results Real Jobs Innovation Report 2001-2002*, Canberra: Big Island Graphics and Corporate Communications ISR.
- Commonwealth of Australia (2005), *Parliamentary Debates*, Senate, 11 October 2005, p. 138 (Special Minister of State).
- Council of Australian Governments (2004a), *Principles and Guidelines for National Standard Setting and Regulatory Action by Ministerial Councils and Standard-Setting Bodies*, Canberra: Department of the Prime Minister and Cabinet.
- Council of Australian Governments (2004b), *Communiqué: 25 June 2004*, Canberra: Department of the Prime Minister and Cabinet.
- Council of Australian Governments (2006), *Communiqué: 10 February 2006*, Canberra: Department of the Prime Minister and Cabinet.

- Dawson [Trade Practices Act Review Committee] (2003), *Trade Practices Act Review*, Canberra: CanPrint Communications Pty Ltd.
- Donald, B. and J. Haydon (1978), *Trade Practices Law*, Volume 1, Sydney: Law Book Co.
- Eagles, I. and L. Longdin (2003), 'Competition in Information and Computer Technology Markets: Intellectual Property Licensing and Section 51(3) of the Trade Practices Act 1974', Queensland University of Technology Law and Justice Journal, 3(1), 31-50.
- Ergas [Intellectual Property and Competition Review Committee] (2000), Review of Intellectual Property Legislation under the Competition Principles Agreement Canberra: IP Australia.
- Ergas Interim [Intellectual Property and Competition Review Committee] (2000), Interim Report Canberra, Australia: IP Australia.
- Explanatory Memorandum (1974), *Trade Practices Bill 1974* (Cth), Canberra: Australian Government Publishing Service.
- Federal Trade Commission (1996), Anticipating the 21st Century: Competition Policy in the New High-Tech, Global Marketplace Volume I: Competition Policy, A Report by Federal Trade Commission Staff, Washington DC: Federal Trade Commission.
- Federal Trade Commission (2002), Competition and Intellectual Property Law and Policy in the Knowledge-Based Economy, Transcript 25 February 2002, Waldorf: For The Record Inc.
- Federal Trade Commission (2003), *To Promote Innovation: The Proper Balance of Competition and Patent Law and Policy*, Washington DC: Federal Trade Commission.
- Federal Trade Commission (2007), Antitrust Enforcement and Intellectual Property Rights: Promoting Innovation and Competition, Washington DC: Federal Trade Commission.
- Fung, J. (1998), 'The Case of an Awkward Interface: Patents v Competition', University of New South Wales Law Journal, 21(3), 757-786.
- Gambrell, J. (2000), 'The Evolving Interplay of Patent Rights and Antitrust Restraints in the Federal Circuit', *Texas Intellectual Property Law Journal*, 9(2), 137-157.

- Gifford, D. (2003), 'Antitrusts' Troubled Relations with Intellectual Property', *Minnesota Law Review*, 87(6), 1695-1718.
- Ginarte, J. and W. Park (1997), 'Determinants of Patent Rights: A Cross-National Study', *Research Policy*, 26(3), 283-301.
- Hilmer [Independent Committee of Inquiry into Competition Policy in Australia] (1993), *National Competition Policy*, Canberra: Australian Government Printing Service.
- Hovenkamp, H., M. Lemley and M. Janis (2003), 'Anti-competitive Settlements of Intellectual Property Disputes', *Minnesota Law Review*, 87(6), 1719-1766.
- Industry Commission (1996), *Regulation and Its Review 1995-96*, Annual Report Series, Canberra: Australian Government Printing Service.
- IP Australia (2001), Government Response to Intellectual Property and Competition Review Recommendations, Canberra: IP Australia.
- IP Australia (2007), Australian Patent Office Manual of Practice and Procedures, Canberra: IP Australia.
- Kallaugher, J. and A. Weitbrecht (2005), 'Developments under Articles 81 and 82 EC: The Year 2004 in Review', *European Competition Law Review*, 26(3), 188-197.
- Kitch, E. (1977) 'The Nature and Function of the Patent System', *Journal of Law and Economics*, 20(2), 265-290.
- Kitch, E. (2000), 'Elementary and Persistent Errors in the Economic Analysis of Intellectual Property', *Vanderbilt Law Review*, 53(6), 1727-1741.
- Landes, W. and R. Posner (2003), *The Economic Structure of Intellectual Property Law* Cambridge: Harvard University Press.
- Lawson, C. (2002), 'Patenting Genes and Gene Sequences and Competition:

  Patenting the Expense of Competition', *Federal Law Review*, 30(1), 97-133.
- Lawson, C. (2008), 'Managerialist Influences on Granting Patents in Australia', Australian Journal of Administrative Law, 15(1), 1-30.
- Lawson, C. and C. Pickering (2004), "TRIPs-Plus" Patent Privileges An Intellectual Property 'Cargo Cult' in Australia', *Prometheus* 22(4), 355-377.
- Lawson, C. and R. Hindmarsh (2007), 'Regulating Genetically Modified Organisms:

  A Case Study Assessing Regulatory Quality and Performance', *Australian Business Law Review*, 35(3), 181-203.

- Lemley, M. (1997), 'The Economics of Improvement in Intellectual Property Law', *Texas Law Review*, 75(5), 989-1084.
- Letwin, W. (1954), 'The English Common Law Concerning Monopolies', *University of Chicago Law Review*, 21(3), 355-385.
- Lindgren, K. (2005), 'The Interface Between Intellectual Property and Antitrust:

  Some Current Issues in Australia', *Australian Intellectual Property Journal*,
  16(2), 76-94.
- Machlup [Subcommittee on Patents, Trademarks and Copyrights of the Senate Committee on the Judiciary] (1958), *An Economic Review of the Patent System*, 85<sup>th</sup> Congress, 2<sup>nd</sup> Session, Study No 15, Washington DC: Government Printing Office.
- Maskus, K. (2000), *Intellectual Property Rights in a Global Economy*, Washington DC: Institute for International Economics.
- Merges, R. (1992), 'Uncertainty and the Standard of Patentability', *High Technology Law Journal*, 7(1), 1-70.
- National Competition Council (1997), *Compendium of National Competition Policy Agreements*, Canberra: Australian Government Printing Service.
- National Competition Council (1998a), *Review of ss* 51(2) and 51(3) of the Trade Practices Act 1974, Draft Report, Canberra: Australian Government Printing Service.
- National Competition Council (1998b), *Review of ss* 51(2) and 51(3) of the Trade Practices Act 1974, Issues Paper, Canberra: Australian Government Printing Service.
- National Competition Council (2003), Assessment of Governments' Progress in Implementing the National Competition Policy and Related Reforms, Vol 2: Legislation Review and Reform, Canberra: AusInfo.
- National Competition Council (2004), *National Competition Council Legislation Review Compendium* (5th ed), Canberra: AusInfo.
- National Competition Council (2005), *Annual Report 2004-2005*, Canberra: National Competition Council.
- Nielsen, J. (2004), 'Reach-Through Rights in Biomedical Patent Licensing: A Comparative Analysis of Their Anti-Competitive Reach', *Federal Law Review*, 32(2), 169-204.

- Oddie, C. and P. Eyers (2004), 'Erosion of Rights or Redressing the Balance:

  Competition Challenges to Intellectual Property Rights', *Trade Practices Law Journal*, 12(1), 6-18.
- Office of Best Practice Regulation (2007a), *Best Practice Regulation Handbook*, Canberra: Productivity Commission.
- Office of Best Practice Regulation (2007b), *Best Practice Regulation Report* 2006-2007, Annual Report Series, Canberra: Productivity Commission.
- Parchomovsky, G. and P. Wagner (2005), 'Patent Portfolios', *University of Pennsylvania Law Review*, 154(1), 1-77.
- Pitofsky, R. (1997), 'The Political Content of Antitrust', *University of Pennsylvania Law Review*, 127(4), 1051-1075.
- Pitofsky, R. (2001), 'Challenges of the New Economy: Issues at the Intersection of Antitrust and Intellectual Property', *Antitrust Law Journal*, 68(3), 913-924.
- Productivity Commission (2000), *Regulation and Its Review 1999-2000*, Annual Report Series, Canberra: AusInfo.
- Productivity Commission (2001), *Regulation and Its Review 2000-2001*, Annual Report Series, Canberra: AusInfo.
- Productivity Commission (2002), *Regulation and Its Review 2001-2002*, Annual Report Series, Canberra: AusInfo.
- Productivity Commission (2003), *Regulation and Its Review 2002-2003*, Annual Report Series, Canberra: AusInfo.
- Productivity Commission (2004), *Regulation and Its Review 2003-2004*, Annual Report Series, Canberra: AusInfo.
- Productivity Commission (2005a), *Review of National Competition Policy Reforms*, Report No 33, Canberra: Productivity Commission.
- Productivity Commission (2005b), Report to the National Competition Council on the Setting of National Standards and Regulatory Action: 1 April 2004-31 March 2005, Canberra: Productivity Commission.
- Rimmer, S. (2006), 'Best Practice Regulations and Licensing as a Form of Regulation', *Australian Journal of Public Administration*, 65(2), 3-15.
- Samuel [National Competition Council] (1999), *Review of Sections 51(2) and 51(3) of the Trade Practices Act 1974*, Final Report, Canberra: CanPrint Communications.

- Scotchmer, S. (1991), 'Standing on the Shoulders of Giants: Cumulative Research and the Patent Law', *Journal of Economic Perspectives*, 5(1): 29-41.
- Scherer, F. (1972), "Nordhaus" Theory of Optimal Patent Life: A Geometric Reinterpretation', *American Economic Review*, 62(3), 422-427.
- Stedman, J. (1973), 'Patents and Antitrust: The Impact of Varying Legal Doctrines', *Utah Law Review*, 588-617.
- Skehill, S. (1992), 'Competition Policy' in Economic Planning Advisory Council, Competition and Economic Efficiency, Background Paper No 19, Canberra: Australian Government Printing Service.
- Stonier [Industrial Property Advisory Committee] (1984), *Patents, Innovation and Competition in Australia*, Canberra: Australian Government Printing Service.
- Trade Practices Act Review Committee (1976), *Report to the Minister for Business* and Consumer Affairs, Canberra: Australian Government Printing Service.
- Trade Practices Commission (1991), Application of the Trade Practices Act to Intellectual Property, Background Paper, Canberra: Trade Practices Commission.
- Transfield Pty Ltd v Arlo International Ltd (1980) 144 CLR 83 (Barwick CJ, Stephen, Mason, Wilson and Murphy JJ).
- Treasury (2003), Commonwealth Government Response to the Review of the Competition Provisions of the Trade Practices Act 1974, Canberra: Treasury.
- United States Department of Justice and the Federal Trade Commission (1995),

  Antitrust Guidelines for the Licensing of Intellectual Property, Washington

  DC: United States Department of Justice and the Federal Trade Commission.
- Universal Music Australia Pty Ltd v Australian Competition and Consumer Commission (2003) 57 IPR 353 (Wilcox, French and Gyles JJ).
- Weisbrot [Australian Law Reform Commission] (2004), *Genes and Ingenuity: Gene Patenting and Human Health*, Report No 99, Sydney: SOS Printing Group Pty Ltd.