

LOCKING IN CUSTOMERS, LOCKING OUT COMPETITORS: ANTI-CIRCUMVENTION LAWS IN AUSTRALIA AND THEIR POTENTIAL EFFECT ON COMPETITION IN HIGH TECHNOLOGY MARKETS

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[Australian copyright law is poised on the brink of major change. Even before a finalised test case of the Digital Agenda Amendments, Australia had committed to a wholesale rewrite of those reforms under the Australia–United States Free Trade Agreement. This article falls broadly into two parts. Part II examines the intellectual property laws relating to digital rights management technologies. It explores the history of so-called ‘anti-circumvention’ laws nationally and internationally, as well as important precedents. Part III examines whether Australian competition law is equipped to address any anti-competitive conduct facilitated by technological protection measures, which can be used to lock in consumers and lock out competitors. Important US precedents including Lexmark International Inc v Static Control Components Inc and Chamberlain Group Inc v Skylink Technologies Inc are analysed under Australian law, both before and after the full implementation of the Australia–United States Free Trade Agreement, including an examination of relevant provisions of Part IV of the Trade Practices Act 1974 (Cth), especially the intellectual property exception in s 51(3).]

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I INTRODUCTION

The debate over the underlying policy objectives of intellectual property (‘IP’) law and competition law (and, indeed, the appropriate relationship or ‘interface’ between the two) has a long history. In the middle of the 20th century, the Austrian economist, Joseph Schumpeter, recognised the important pro-competitive effects of invention and innovation. He described competition in terms of a dynamic process of rivalry in which entrepreneurs and innovators constantly seek to discover new profit opportunities. This dynamic competition for profits produces ‘the new commodity, the new technology, the new source of

supply, the new type of organisation'.¹ All firms are subject to a 'perennial gale of creative destruction'² in which new markets are created and old ones are destroyed.

At the beginning of the 21st century, this process of 'creative destruction' has increased dramatically. Invention and innovation are increasingly driving the so-called 'new' economy. New and better high technology products are constantly being released in areas as diverse as entertainment, telecommunications, media, computers and health care. These new technologies displace successful incumbents. Competition in the new economy is being driven by a 'winner takes all' game to capture the 'transient monopolies' that are necessary to provide incentives to make investments.³

IP laws have a crucial role to play in this process as they are necessary to prevent market failure arising from 'free-riding' (copying by others without payment).⁴ Invention and innovation have the properties of a 'public good': once they are in the public domain it is difficult to prevent their use by others unless they are protected by IP laws. Without some form of statutory protection there would be little or no incentive to innovate.

The exclusive property rights granted by IP statutes were once regarded with a high degree of suspicion by regulators entrusted with the enforcement of competition laws. However, their role is now better understood and they are seen, for the most part, as pro-competitive.⁵

First, IP rights provide their owners with limited monopoly rights which they themselves can exploit through manufacture and marketing or through licensing others to do so. These limited monopoly rights serve as an incentive to innovate — innovation is the process by which new *products* are developed based on inventions. Second, licensing is often the best way of ensuring that IP rights find their way into the hands of the most efficient producers and distributors so that the final products incorporating the IP rights can be produced and distributed most efficiently.

This article is concerned with amendments to the *Copyright Act 1968* (Cth) which provide for technological protection measures ('TPMs'). While the underlying policy objective to prevent copying can be justified as pro-competitive, we believe that TPMs may be used for anti-competitive purposes. They can deny access to copyright, as well as prevent copying, and

¹ Joseph Schumpeter, *Capitalism, Socialism and Democracy* (5th ed, 1976) 87.

² *Ibid.*

³ See Richard A Posner, 'Antitrust in the New Economy' (2001) 68 *Antitrust Law Journal* 925.

⁴ See Henry Ergas, 'Intellectual Property and Competition' (Paper presented at the Federal Trade Commission and Department of Justice Hearings on Antitrust and Intellectual Property Law and Policy in the Knowledge-Based Economy, Washington, DC, 23 May 2002) 2–11 <http://www.cccp.anu.edu.au/publications/FTC-DOJ_23May02_IPCompAus_v06.pdf>, on the economic characteristics of IP and the social benefit that is produced by 'competition through innovation'.

⁵ See Herbert J Hovenkamp, 'IP and Antitrust Policy: A Brief Historical Overview' (Research Paper No 05-31, The University of Iowa College of Law, 2005) <<http://ssrn.com/abstract=869417>>; F M Scherer and David Ross, *Industrial Market Structure and Economic Performance* (3rd ed, 1990) 613–60; William M Landes and Richard A Posner, *The Economic Structure of Intellectual Property Law* (2003) 334–53; Aspen Publishers, *IP and Antitrust: An Analysis of Antitrust Principles Applied to Intellectual Property Law*, vols 1–2 (2005 Supp). For an EU competition law perspective, see Valentine Korah, 'The Interface between Intellectual Property and Antitrust: The European Experience' (2002) 69 *Antitrust Law Journal* 801.

thereby prevent interoperability with other products. In this way, markets can be protected from competition and market power can be lifted from one market to another in an anti-competitive way. This article explains how TPMs can be used in an anti-competitive manner and considers whether the competition provisions of the *Trade Practices Act 1974* (Cth) ('TPA') are adequate to deal with the problem.

II DIGITAL RIGHTS MANAGEMENT AND THE LAW

A Overview

1 *The Origins of DRM*

All analogue technologies, such as audio tapes, video cassette recorders ('VCRs'), vinyl records and printed books, suffer from a common flaw — only imperfect copying of analogue material is possible. Such copying necessarily involves a loss of quality, the effect of which is cumulative — a copy of a copy of a copy of analogue material is often of such a low quality that it is unsuitable for many purposes. This effect has acted as a natural disincentive to wide scale copying of material that infringes copyright. Nevertheless, large copyright holders greeted new developments in analogue technology (including cable television, audio tapes and VCRs) with trepidation. Amid predictions of market destruction and bankruptcy in the entertainment industries, early attempts by copyright lobbyists to secure legislative protection, or to suppress new technologies through litigation,⁶ typically failed.

As a result, copyright holders turned to self-help, in the form of embryonic 'rights management' methods more commonly known (at the time) as 'copy-protection'. Copy-protection typically operated by attempting to degrade artificially the quality of any copies made. However, copy-protection had no legal protection and could be freely circumvented.

Digital technologies,⁷ unlike analogue, allow perfect reproduction of material. In a digital environment, a copy of a copy of a copy of a copy is identical to the original, and digital information is ideally suited for transmission over long distances with no loss of quality.

In the early 1980s, the spread of digital technology into the home entertainment market caused even greater concern to copyright holders. Over time, methods of technological self-help evolved into what is now known as digital rights management ('DRM'). Paradoxically, while the digital environment is more susceptible to infringing copying and distribution of copyright material, it also has a much greater potential to prevent such infringing activity. This is because digital technology lends itself to the creation and enforcement of sophisticated DRM systems, which, using encryption and other means, control not only potentially infringing copying of material, but also access to the material itself.

⁶ See generally *Sony Corporation of America v Universal City Studios Inc*, 464 US 417 (1984) ('*Betamax Case*'); *CBS Songs Ltd v Amstrad Consumer Electronics Plc* [1988] AC 1013, involving twin deck audio tape recorders.

⁷ For example, compact discs ('CDs'), digital video discs or digital versatile discs ('DVDs'), personal computer ('PC') files and networking, digital audio tapes ('DATs') and minidisks.

Initially, these DRM systems did not enjoy any legal status or protection. Arguing that ‘digital is different’, groups representing the interests of copyright holders lobbied at both national and international levels for legal protection of their DRM systems to prevent ‘piracy’ allegedly facilitated by the digital revolution.⁸ Such lobbying was partially successful. In 1992, the United States passed the *Audio Home Recording Act of 1992* (‘AHRA’),⁹ which required all digital audio recording devices manufactured, imported or distributed within the United States to use a DRM system known as the ‘Serial Copy Management System’.¹⁰ This primarily affected the then newly released DAT and minidisc formats, which, as it turned out, were less than commercially successful — possibly due in part to consumer dissatisfaction with the restrictive Serial Copy Management System they were required to contain.

In markets, DRM technology effectively creates a technology bottleneck that resembles an ‘essential facility’. By denying access to the DRM technology the owner can effectively preclude competition in dependent markets.¹¹ Anti-circumvention laws therefore give copyright owners the legal power to create closed technology platforms which exclude competitors from interoperating with them.

To illustrate the nature of the problem, consider that DRM technology is used in connection with music sold over the internet. The major record companies are the owners of the copyright in the music.¹² They agree to allow the music to be sold only on the condition that the downloaded music is protected by a DRM technology. The music can be played on a buyer’s PC, but only using software produced by licensees of the DRM technology. Other software will be unable to read or play the downloaded music files. Likewise, if the buyer wishes to use the songs on a portable player such as a Walkman or iPod, they can only do so using a portable player which implements the DRM technology. Competition in the downstream market for compatible portable players and PC software is precluded.¹³

DRM technology can thus be seen to lock in the consumer who downloads music under one DRM technology to using a portable player (such as an iPod) which employs a compatible DRM technology. Simultaneously, it can be seen to

⁸ See Submission to House of Representatives Standing Committee for Legal and Constitutional Affairs, Parliament of Australia, *Inquiry into Copyright Amendment (Digital Agenda) Bill 1999*, 7 October 1999, Submission No 59, 2 (International Intellectual Property Alliance).

⁹ Pub L No 102-563, 106 Stat 4237.

¹⁰ 17 USC § 1002(a) (2000 & Supp IV, 2004).

¹¹ A dependent market is one in which it is necessary for a product to have access to the TPM before it is able to compete successfully in the market — for example, the market for DRM-protected music playable on Apple iPod devices, or the market for portable players (such as iPods) that are compatible with music purchased from the Apple iTunes Music Store. Both of these markets are dependent on access to the Apple iTunes DRM technology (known as ‘FairPlay’).

¹² Technically, copyright subsists in the sound recordings and in the underlying music and lyrics.

¹³ See the decision of the French competition authority, the Conseil de la Concurrence, in the case brought by VirginMega, a subsidiary of the Virgin Group, against Apple Computer France: Conseil de la Concurrence, *Décision No 04-D-54 du 9 novembre 2004 relative à des pratiques mises en oeuvre par la société Apple Computer Inc dans les secteurs du téléchargement de musique sur Internet et des baladeurs numériques* (2004) (‘VirginMega Case’) <<http://www.conseil-concurrence.fr/pdf/avis/04d54.pdf>>.

lock out competitors who cannot get a licence for the use of the DRM technology to produce competing compatible products.

This means that a consumer must buy a multitude of different devices, each supporting different but incompatible standards and DRM technologies, or resort to a potentially illegal circumvention of the DRM to ‘format-shift’ their legally purchased content.¹⁴

2 *DRM and Business Models*

Taking console games platforms (such as the Sony PlayStation, or the Microsoft Xbox) as an example, it is likely that the use of DRM systems in such platforms is motivated by more than merely a desire to prevent or deter the infringement of copyright. Peter L Higgs identifies three motives:

- to prevent the unauthorised manufacture or casual duplication by others of software that the company has the rights to publish and to distribute;
- to ensure that hardware produced by the company can only run software authorised or published by the company; and
- to enforce distribution channel and format segmentation strategies.¹⁵

To this list can be added:

- to ensure that software designed to be used on hardware produced by the company can only be used on hardware produced by the company. This creates a platform lock-in by imposing significant ‘switching costs’ upon users — a user with a significant investment in games in a format compatible with Platform A would have to repurchase those games in a format compatible with Platform B in order to switch platforms;¹⁶
- to restrict or prohibit the resale or transfer of legitimately manufactured and purchased software after their initial purchase. Such controls contribute significantly to platform lock-in because they raise switching costs — if a user cannot resell or transfer their purchased software, switching platforms would require them to write off their investment in that software;
- to prevent arbitrage and facilitate geographical price discrimination — that is, selling products at different price points in different countries. Apple Computer Inc is currently under investigation by the European Commission for alleged violations of EU competition law for engaging in such conduct;¹⁷

¹⁴ On 14 May 2006, the Attorney-General announced that a new ‘format-shifting’ exception to copyright would be created. However, at this stage, it seems that the exception will not apply where the copyright material is protected by DRM. See Philip Ruddock, Attorney-General, ‘Major Copyright Reforms Strike Balance’ (Press Release, 14 May 2006).

¹⁵ Peter L Higgs, *Understanding the Business Models Driving Manufacturer’s ‘Technological Protection Measures’* (2003) available at CCI: ARC Centre of Excellence for Creative Industries and Innovation (28 November 2006) <<http://wiki.cci.edu.au>>.

¹⁶ This is essentially a counterpart to the ‘publishing controls’ identified by Higgs.

¹⁷ Apple Computer Inc, *Form 10-K: Apple Inc — AAPL: Annual Report Which Provides a Comprehensive Overview of the Company for the Last Year* (2006) 39 <<http://ccbn.10kwizard.com/xml/download.php?repo=tenk&ipage=4566832&format=PDF>>. Apple prevents iTunes Music Store customers located in the UK from purchasing music at cheaper prices from the iTunes Music Stores in other EU countries.

- to restrict or prevent the production of ‘unauthorised’ accessories — that is, third-party add-ons or other products which must interoperate with company-produced ‘authorised’ hardware and/or software; and
- to restrict or prevent a company’s products from being serviced by ‘unauthorised’ service agents.

While the first of these motives (preventing infringing copying) is relatively uncontroversial,¹⁸ the use of DRM to create and enforce the other controls identified above has been widely condemned,¹⁹ and has been the subject of recent litigation in the United States.²⁰

B The History of Anti-Circumvention Laws

1 The WIPO ‘Internet Treaties’

The *WIPO Copyright Treaty*²¹ and the *WIPO Performances and Phonograms Treaty*²² resulted from the 1996 World Intellectual Property Organization (‘WIPO’) Diplomatic Conference on Certain Copyright and Related Rights Questions. They took effect in 2002 after each received the required 30 country notifications.²³ Collectively and informally known as the ‘Internet Treaties’, the *WCT* and *WPPT* constitute the first international attempt to prescribe minimum standards of legal protection for DRM technologies. Their approach differs from that of the *AHRA*, in that they seek to prevent the circumvention of DRM systems, not mandate the inclusion of DRM in particular classes of technology. Article 11 of the *WCT* provides:

Contracting Parties shall provide adequate legal protection and effective legal remedies against the circumvention of effective technological measures that are used by authors in connection with the exercise of their rights under this Treaty or the *Berne Convention* and that restrict acts, in respect of their works, which are not authorized by the authors concerned or permitted by law.²⁴

The terms of this provision are quite broad and leave substantial latitude to states in their implementation of the provision. The term ‘effective technological measures’ is not further defined, creating some uncertainty.

Notably, the Internet Treaties only require that adequate protection and effective remedies be provided against ‘the circumvention of effective technological measures’ — that is, the act of circumvention itself. Strictly

¹⁸ The use of DRM to restrict copying is not above criticism: while it prevents infringing copying, it also prevents copying that would not infringe copyright, such as fair dealing and making backup copies of computer software.

¹⁹ See, eg, Electronic Frontier Foundation, *Unintended Consequences: Seven Years under the DMCA* (2006) <http://www.eff.org/IP/DMCA/DMCA_unintended_v4.pdf>.

²⁰ See further below Part II(E).

²¹ Opened for signature 20 December 1996, 36 ILM 65 (entered into force 6 March 2002) (‘*WCT*’).

²² Opened for signature 20 December 1996, 36 ILM 76 (entered into force 20 May 2002) (‘*WPPT*’).

²³ WIPO, *Treaties and Contracting Parties: Summary of the WIPO Copyright Treaty (WCT) (1996)* <http://www.wipo.int/treaties/en/ip/wct/summary_wct.html>; WIPO, *Treaties and Contracting Parties: Summary of the WIPO Performances and Phonograms Treaty (WPPT) (1996)* <http://www.wipo.int/treaties/en/ip/wppt/summary_wppt.html>.

²⁴ Article 18 of the *WPPT* contains a similar section, but deals only with the rights of performers and producers of sound recordings rather than copyrighted works generally.

construed, the Internet Treaties do not require restrictions on devices and technology which might be used to perform the circumvention.

2 The DMCA

The US implemented art 11 of the *WCT* by amendments contained in Title I of the *Digital Millennium Copyright Act of 1998* ('*DMCA*').²⁵ Subject to narrow exceptions, the amendments prohibit the circumvention of 'a technological measure that effectively controls access to a work protected under this title',²⁶ and commercial dealings with tools capable of circumventing protection measures ('circumvention devices').²⁷

The anti-circumvention provisions of the *DMCA* arguably go beyond the requirements of the Internet Treaties.²⁸ Some commentators have suggested that US copyright lobbyists sought the implementation of a stronger level of protection in the hope that other countries would model their implementation of the Internet Treaties on the *DMCA*.²⁹

3 Digital Agenda Amendments

Australia's decision in mid-1998 to relax controls on parallel importation³⁰ did not go unnoticed by the US, and attracted significant criticism. Australia's system of IP protections, which had been described by the US from 1995 to 1998 as providing, '[w]ith a few exceptions ... world class intellectual property protection'³¹ was described in 2000 as providing merely '[i]n general ... sound intellectual property protection'.³²

The US was also 'concerned with the recent Australian minimalist approach towards intellectual property protection in several important areas' and 'made these concerns known to the Australian Government on numerous occasions.'³³

During the 1990s, the US placed Australia on a statutory 'watch list' of countries with inadequate protection for IP rights in eight out of 10 years,³⁴ because of concerns over Australia's plan to remove controls on parallel importation.³⁵

²⁵ 17 USC §§ 1201–5 (1998).

²⁶ *DMCA*, 17 USC § 1201(a)(1)(A) (1998).

²⁷ *DMCA*, 17 USC § 1201(a)(2) (1998).

²⁸ Pamela Samuelson, 'Intellectual Property and the Digital Economy: Why the Anti-Circumvention Regulations Need To Be Revised' (1999) 14 *Berkeley Technology Law Journal* 519, 521; Dan L Burk, 'Anti-Circumvention Misuse' (Research Paper No 02-10, University of Minnesota Law School, 2002) <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=320961>.

²⁹ Herbert J Hammond et al, 'The Anti-Circumvention Provision of the *Digital Millennium Copyright Act*' (2002) 8 *Texas Wesleyan Law Review* 593, 595.

³⁰ See *Copyright Amendment Act [No 1] 1998* (Cth); *Copyright Amendment Act [No 2] 1998* (Cth).

³¹ See, eg, Office of the United States Trade Representative, *1997 National Trade Estimate Report on Foreign Trade Barriers* (1997) 17; Office of the United States Trade Representative, *1998 National Trade Estimate Report on Foreign Trade Barriers* (1998) 16.

³² Office of the United States Trade Representative, *2000 National Trade Estimate Report on Foreign Trade Barriers* (2000) 12.

³³ *Ibid.*

³⁴ International Intellectual Property Alliance, *2004 Special 301 Report on Global Copyright Protection and Enforcement* (2004) app D <http://www.iipa.com/special301_TOCS/2004_SPEC301_TOC.html>.

³⁵ *Ibid* app E.

Australia participated in the drafting of the WIPO Internet Treaties, but is not yet a signatory to them.³⁶ Nonetheless, the Australian Government legislated to implement the Internet Treaties to bring Australian copyright law into the 21st century and maintain the balance between the rights of copyright owners and copyright users in the digital environment.³⁷ The *Copyright Amendment (Digital Agenda) Act 2000* (Cth) (*Digital Agenda Amendments*) was an independent implementation of the Internet Treaties, one which adhered more closely to the letter of the Internet Treaties than the *DMCA*.

This departure from the 'precedent' of the *DMCA* generated significant controversy amongst copyright holders. The US reported that 'US copyright interests have stressed deep concern about the [draft] digital agenda legislation'³⁸ and that

[t]he [copyright] industry is concerned that the legislation ... would allow for unfettered worldwide trafficking in devices and services aimed at hacking through encryption, password protection and other technologies copyright owners use to manage access to and use of their works.³⁹

On the issue of TPMs, the House of Representatives Standing Committee on Legal and Constitutional Affairs' *Advisory Report on the Copyright Amendment (Digital Agenda) Bill 1999* observed:

At their most extreme positions, the copyright owners wish to manage all access to copyrighted material, both lawful and unlawful, apart from access for a few enumerated, legitimate purposes. Conversely, the copyright users wish to have uncontrolled access to all copyrighted material, and leave the copyright owners to obtain redress for any consequent infringement of their copyright through infringement actions.⁴⁰

The *Digital Agenda Amendments to the Copyright Act 1968* (Cth) define a 'technological protection measure' as:

a device or product, or a component incorporated into a process, that is designed, in the ordinary course of its operation, to *prevent or inhibit the infringement of copyright* in a work or other subject-matter by either or both of the following means:

- (a) by ensuring that access to the work or other subject matter is available solely by use of an access code or process (including decryption, unscrambling or other transformation of the work or other subject-matter) with the authority of the owner or licensee of the copyright;

³⁶ The *Australia–United States Free Trade Agreement* ('*AUSFTA*') requires Australia to accede to the Internet Treaties by 1 January 2007: *AUSFTA*, opened for signature 18 May 2004, [2005] ATS 1, art 17.12 (entered into force 1 January 2005).

³⁷ Commonwealth, *Parliamentary Debates*, Senate, 14 August 2000, 16 245 (Senator Ian Campbell).

³⁸ Office of the United States Trade Representative, *2000 National Trade Estimate Report*, above n 32, 13.

³⁹ *Ibid.*

⁴⁰ House of Representatives Standing Committee on Legal and Constitutional Affairs, Parliament of Australia, *Advisory Report on Copyright Amendment (Digital Agenda) Bill 1999* (1999) 63–4.

(b) through a copy control mechanism.⁴¹

The Act then defines a ‘circumvention device’ as:

a device (including a computer program) having only a limited commercially significant purpose or use, or no such purpose or use, other than the circumvention, or facilitating the circumvention, of an [sic] technological protection measure.⁴²

Subject to narrow exceptions (which are nonetheless broader than those contained in the *DMCA*), the *Digital Agenda Amendments* prohibit a wide range of dealings with circumvention devices.⁴³ However, unlike the *DMCA*, the amendments do not prohibit the *use* of a circumvention device. The Government’s rationale for banning the manufacture of, and commercial dealings with, circumvention devices (as opposed to their use) was that ‘the most significant threat to copyright owners’ rights lies in preparatory acts for circumvention, such as manufacture, importation, making available online and sale of devices, rather than individual acts of circumvention.’⁴⁴

The exceptions allowed by the *Digital Agenda Amendments* do not include many existing exceptions to copyright generally, such as fair dealing, and making backup copies of computer software.

C Stevens v Sony

The *Digital Agenda Amendments’* anti-circumvention provisions were considered by the High Court in *Stevens v Kabushiki Kaisha Sony Computer Entertainment*.⁴⁵

1 First Instance

Sony PlayStation games consoles contained a proprietary DRM system developed by Sony. Similar to the region-coding system for DVDs, PlayStations were programmed on a regional basis such that a PlayStation console in one region would not play PlayStation games from any other region. Genuine PlayStation discs contained an ‘access code’ which corresponded to the geographical area in which the disc was intended to be used. The access code was embedded in the disc in such a way that any attempt to copy the disc (that is, the PlayStation game and the associated access code) would result in the game being copied, but not the access code.

⁴¹ *Copyright Act 1968* (Cth) s 10(1) (emphasis added), as amended by *Digital Agenda Amendments* sch 1 item 15B.

⁴² *Copyright Act 1968* (Cth) s 10(1), as amended by *Copyright Amendment (Parallel Importation) Act 2003* (Cth) sch 1 item 1. Due to a drafting oversight, the original amendments introduced by *Digital Agenda Amendments* sch 1 item 5 used the term ‘an effective technological protection measure’ instead of ‘a technological protection measure’. The definition was amended to omit the word ‘effective’ by the *Copyright Amendment (Parallel Importation) Act 2003* (Cth) sch 1 item 1.

⁴³ *Copyright Act 1968* (Cth) s 116A. For an explanation of the prohibited dealings, see below n 47.

⁴⁴ Submission to House of Representatives Standing Committee on Legal and Constitutional Affairs, Parliament of Australia, *Inquiry into Copyright Amendment (Digital Agenda) Bill 1999*, Undated, Submission No 75, 20 (Attorney-General’s Department and Department of Communications, Information Technology and the Arts).

⁴⁵ (2005) 224 CLR 193 (‘*Stevens v Sony*’).

When a disc was inserted into a PlayStation console, the console checked for the presence of the access code on the disc, and unless the disc contained an access code which matched the region-coding of the console, the console would refuse to play the disc.

The effect of this system was twofold. First, copies — including backup copies legally made under *Copyright Act 1968* (Cth) s 47C — of PlayStation games would not work on an unmodified PlayStation console, because they lacked the necessary access code. Second, original PlayStation games which were imported from overseas would not work on an unmodified PlayStation console, because the access code they contained was from the wrong geographical area.

Eddy Stevens sold and installed so-called ‘mod chips’ which modified PlayStation consoles so they would play games without requiring the presence of the correct access code on the disc. A group of Sony corporations filed suit against Stevens in 2001,⁴⁶ alleging inter alia that he had unlawfully sold circumvention devices contrary to s 116A of the *Copyright Act 1968* (Cth).⁴⁷ Whether the mod chips were a circumvention device turned upon whether Sony’s access code DRM system was a TPM within the meaning of s 10(1) of the *Copyright Act 1968* (Cth).

At first instance, Sackville J held that because the access code DRM did not prevent the *making* of a copy of a PlayStation game (which would infringe the copyright subsisting in the game as a computer program), but instead rendered the copy unusable on an unmodified PlayStation, the DRM was designed merely to deter or discourage the infringement of copyright in PlayStation games, not prevent it.⁴⁸ On this construction, the access code DRM system did not constitute a ‘technological protection measure’ within s 10(1) of the *Copyright Act 1968* (Cth).

Sony submitted that the definition of ‘technological protection measure’ should be construed broadly so as to include a device which had the practical effect of discouraging infringement of copyright (the ‘practical effect argument’).⁴⁹ However, Sackville J ultimately adopted a narrower construction, holding that to ‘prevent or inhibit the infringement of copyright in a work’, a TPM must *physically* prevent acts of infringement, and that merely having a ‘general deterrent or discouraging effect’ was insufficient.⁵⁰ It followed that if the only way in which the DRM ‘inhibited’ infringement of copyright in PlayStation games was by discouraging the copying of them, the DRM system was not a TPM within the meaning of the *Copyright Act 1968* (Cth).⁵¹

In the alternative, Sony argued that the access code DRM prevented users of an infringing copy of a game (a computer program) from reproducing a

⁴⁶ *Kabushiki Kaisha Sony Computer Entertainment v Stevens* (2002) 200 ALR 55 (‘*Sony v Stevens* (First Instance)’).

⁴⁷ Section 116A provides that copyright holders may (subject to narrow exceptions for ‘permitted purposes’) bring an action for dealings with circumvention devices including the making, selling, hiring, distributing or exhibiting in public for trade, importation for selling hiring or exhibiting, making available online and promoting or advertising of a circumvention device.

⁴⁸ *Sony v Stevens* (First Instance) (2002) 200 ALR 55, 79.

⁴⁹ *Ibid.*

⁵⁰ *Ibid.* 81.

⁵¹ *Ibid.* 82 (Sackville J).

substantial part of the computer program in the random access memory ('RAM') of the PlayStation console by playing it (the 'reproduction in RAM argument').⁵² This reproduction would only infringe copyright in the game if it reproduced a substantial part of the game in a 'material form' as defined in s 10(1) of the *Copyright Act 1968* (Cth).⁵³

The definition of 'material form', as it then stood,⁵⁴ included 'any form (whether visible or not) of storage from which the work or adaptation, or a substantial part of the work or adaptation, can be reproduced.'⁵⁵ Sackville J held that a reproduction could only be 'in material form' if it was amenable to further reproduction, and that, because it was not possible to replicate the information stored in the RAM of the PlayStation console, it was not 'in material form'. The reproduction in RAM argument therefore failed.⁵⁶

In a late amendment to their pleadings, Sony advanced a further alternative argument: that PlayStation games embodied cinematograph films, and that their DRM prevented their infringing reproduction in the RAM of the console (the 'cinematograph film argument').⁵⁷ On the 'very sketchy'⁵⁸ evidence led in support of this argument, his Honour was unable to conclude that the alleged copying constituted the making of a copy of a cinematograph film for the purposes of s 86(a) of the *Copyright Act 1968* (Cth).⁵⁹

Since Sony failed to make out any of their alternative arguments, it followed that the mod chips which Stevens was alleged to have distributed were not circumvention devices and Sony's claim under s 116A of the *Copyright Act 1968* (Cth) failed.⁶⁰

However, Sackville J noted in obiter dicta that, on the evidence before him, if the access code DRM had been a TPM, he would have found that the mod chips were circumvention devices.⁶¹

2 Appeal

Sony appealed to the Full Federal Court.⁶² The decision of the Full Federal Court in July 2003, while acknowledging that the construction issue was finely balanced, and the definition ambiguous,⁶³ unanimously preferred a wider definition of 'technological protection measure' which included DRM systems

⁵² Ibid.

⁵³ *Copyright Act 1968* (Cth) ss 31(1)(a)(i), 36(1).

⁵⁴ The definition was subsequently amended by the *US Free Trade Agreement Implementation Act 2004* (Cth) sch 9 pt 10 item 186.

⁵⁵ *Copyright Act 1968* (Cth) s 10(1) (emphasis added), prior to amendment by the *US Free Trade Implementation Act 2004* (Cth) sch 9 pt 10 item 186.

⁵⁶ *Sony v Stevens (First Instance)* (2002) 200 ALR 55, 90 (Sackville J).

⁵⁷ Ibid 63 (Sackville J).

⁵⁸ Ibid 91.

⁵⁹ Ibid 93.

⁶⁰ Ibid 82 (Sackville J). Sony's claim under s 42 of the *Fair Trading Act 1987* (NSW) also failed, but a claim of trademark infringement against Stevens succeeded: at 69–70 (Sackville J).

⁶¹ Ibid 94.

⁶² *Kabushiki Kaisha Sony Computer Entertainment v Stevens* (2003) 132 FCR 31 ('*Sony v Stevens (Federal Court Appeal)*').

⁶³ Ibid 54 (Lindgren J).

that deterred or discouraged infringement.⁶⁴ French J noted that issues of competition policy had been pressed upon the Court, but considered that it was the role of Parliament to address any competition issues arising from these laws.⁶⁵

The Full Federal Court (Finkelstein J dissenting) went on to reject Sony's reproduction in RAM argument,⁶⁶ and rejected the cinematograph film argument.⁶⁷

Stevens appealed to the High Court. In October 2005, the High Court unanimously agreed with the reasoning and conclusions of Sackville J and overturned the decision of the Full Federal Court.⁶⁸ Kirby J noted, in passing, that Sony's DRM systems,

[i]n effect, and apparently intentionally ... reduce global market competition. They inhibit rights ordinarily acquired by Australian owners of chattels to use and adapt the same, once acquired, to their advantage and for their use as they see fit.⁶⁹

Kirby J found that one of the purposes of Sony's regional access code was non-copyright related, namely, to enforce 'global market price differentiation'.⁷⁰ His Honour went on to say that

where a choice of interpretation has to be made, the existence of the additional non-copyright purpose of enforcing global market price differentiation does constitute a reason to prefer an outcome that is consistent with the balances ordinarily inherent in copyright legislation over a result that is not.⁷¹

D The AUSFTA

The implementation of the *Digital Agenda Amendments* in 2000 appears to have placated some US concerns, if only temporarily. In 2001, the Office of the United States Trade Representative ('USTR') reported that Australia had '[taken] final action to implement the 1996 *WIPO Copyright* and *WIPO Performances and Phonograms Treaties*.'⁷²

In 2002, the USTR noted that Australia had 'not ratified' the Internet Treaties,⁷³ and in 2003 (after Sony's initial defeat before the Full Federal Court) the USTR reported Australia has 'not yet fully enacted the legislation necessary to enable Australia to accede to [the Internet Treaties]'. Further, it described the *Digital Agenda Amendments* as 'a step toward aligning Australian copyright laws with the obligations imposed by [the Internet Treaties]' but complained that it

⁶⁴ Ibid 41 (French J).

⁶⁵ Ibid.

⁶⁶ Ibid (French J), 76–7 (Lindgren J).

⁶⁷ Ibid 41 (French J), 79–80 (Lindgren J).

⁶⁸ *Stevens v Sony* (2005) 224 CLR 193.

⁶⁹ Ibid 243.

⁷⁰ Ibid 255.

⁷¹ Ibid.

⁷² USTR, *2001 National Trade Estimate Report on Foreign Trade Barriers* (2001) 12.

⁷³ USTR, *2002 National Trade Estimate Report on Foreign Trade Barriers* (2002) 10.

was 'weak in its treatment of technological protection measures.'⁷⁴ At about the same time, formal negotiations for the *AUSFTA*⁷⁵ began.

The United States is the world's largest producer and exporter of copyrighted materials and 'copyright industries' account for over five per cent of US GDP.⁷⁶ It is perhaps then not surprising that since at least the 1980s, the US has sought to impose US standards of IP protection upon all other countries by tying IP protection to issues of international trade.⁷⁷ The US pursuit of ever-increasing minimum standards of IP protection in multilateral and bilateral forums has been referred to as the 'global ratchet for intellectual property rights.'⁷⁸

This 'global ratchet' manifested itself as Chapter 17 of the *AUSFTA*, the largest chapter in both content and substance.⁷⁹ It requires significant amendments to Australian IP laws, perhaps most importantly by requiring Australia to abandon its independent implementation of the Internet Treaties, and instead adopt TPM protections modelled closely on the controversial US *DMCA*.⁸⁰

Under the *AUSFTA*, the definition of 'technological protection measure' is expanded to 'any technology, device, or component that, in the normal course of its operation, *controls access* to a protected work, performance, phonograph, or other protected subject matter, or *protects any copyright*.'⁸¹

Effectively, this amendment abolishes the critical distinction between 'access controls' and 'copying controls' (on which the decision in *Stevens v Sony* turned). The *AUSFTA* also requires Australia to widen significantly the definition of 'circumvention device'⁸² and prohibits the *use* of a circumvention device,⁸³ as opposed to prohibiting only commercial dealings with them.

1 The Phillips Fox Review

During the passage of the *Digital Agenda Amendments*, the Australian Government committed to review the operation of the amendments within three

⁷⁴ USTR, *2003 National Trade Estimate Report on Foreign Trade Barriers* (2003) 10, 12.

⁷⁵ Opened for signature 18 May 2004, [2005] ATS 1 (entered into force 1 January 2005). For a more in-depth examination of the copyright changes required by the *AUSFTA*, see Matthew Rimmer, 'Robbery under Arms: Copyright Law and the Australia-United States Free Trade Agreement' (2006) 11(3) *First Monday* <http://www.firstmonday.org/issues/issue11_3/rimmer/index.html>.

⁷⁶ Industry Functional Advisory Committee on Intellectual Property Rights for Trade Policy Matters ('IFAC-3'), *The US-Australia Free Trade Agreement (FTA): The Intellectual Property Provisions — Report of the Industry Functional Advisory Committee on Intellectual Property Rights for Trade Policy Matters (IFAC-3)* (2004) 8 <http://www.ustr.gov/assets/Trade_Agreements/Bilateral/Australia_FTA/Reports/asset_upload_file813_3398.pdf>.

⁷⁷ See Peter Drahos and John Braithwaite, 'Hegemony Based on Knowledge: The Role of Intellectual Property' in Gordon Walker and Jianfu Chen (eds), *Balancing Act: Law, Policy and Politics in Globalisation and Global Trade* (2004) 204.

⁷⁸ Peter Drahos, *The Global Ratchet for Intellectual Property Rights: Why It Fails as Policy and What Should Be Done about It* (2003) <http://cgkd.anu.edu.au/menus/PDFs/IPRatchet_Drahos.pdf>.

⁷⁹ Joint Standing Committee on Treaties, Parliament of Australia, *Report 61: The Australia-United States Free Trade Agreement* (2004) 225.

⁸⁰ Other changes included a 20-year extension to the term of copyright and significant changes to the definition of 'material form'.

⁸¹ Opened for signature 18 May 2004, [2005] ATS 1, art 17.4.7(b) (entered into force 1 January 2005) (emphasis added).

⁸² *Ibid* art 17.4.7(a)(ii).

⁸³ *Ibid* art 17.4.7(a)(i).

years of commencement. Law firm, Phillips Fox, was appointed to conduct this review which commenced in April 2003, and it delivered its report in January 2004.⁸⁴ The *Phillips Fox Review* was conducted after the decision in *Sony v Stevens (Federal Court Appeal)*,⁸⁵ but before the High Court overturned that decision. More importantly, the report was delivered *before* the *AUSFTA* was finalised.

The *Phillips Fox Review* specifically considered whether the definition of ‘technological protection measure’ achieved the objects of the *Digital Agenda Amendments* as expressed in the Explanatory Memorandum.⁸⁶ In their submissions, copyright owners generally supported the interpretation given by the Full Federal Court,⁸⁷ and, in one case, even argued for a wider interpretation.⁸⁸

The *Phillips Fox Review* found that it was appropriate to amend the existing definition of ‘technological protection measure’ to resolve the uncertainty created by *Sony v Stevens (Federal Court Appeal)*.⁸⁹ To better meet the objectives of the *Digital Agenda Amendments*, and to create a more appropriate balance between the rights of copyright holders and users of copyright material,⁹⁰ the *Phillips Fox Review* also recommended that:

- the definition of ‘technological protection measure’ be amended so as to accord with the interpretation favoured by Sackville J in *Sony v Stevens (First Instance)*;
- the exceptions to the prohibitions on dealing with circumvention devices⁹¹ be broadened to allow for the supply or use of a circumvention device for any use or exception allowed under the *Copyright Act 1968 (Cth)*, including fair dealing and access to a legitimately acquired ‘non-pirated’ product; and
- the use of circumvention devices be otherwise prohibited.⁹²

These recommendations are inconsistent with the *AUSFTA*, and in fact represent almost a complete reversal of its position. The Government did not formally respond to the *Phillips Fox Review* until May 2006 (a delay of over two years), and even then did not address the merits of the recommendations or the

⁸⁴ Phillips Fox, *Digital Agenda Review: Report and Recommendations* (2004) 104 (‘*Phillips Fox Review*’).

⁸⁵ (2003) 132 FCR 31.

⁸⁶ See Phillips Fox, above n 84, chs 13–18.

⁸⁷ *Ibid* 99–100.

⁸⁸ A joint submission of the Business Software Association of Australia and the Business Software Alliance proposed that an even wider interpretation was necessary, arguing that the proper interpretation of the *WCT* requires the definition of ‘technological protection measure’ to extend to any measure to prevent any act not authorised by the copyright owner, including acts outside the exclusive rights of copyright owners: Submission to Phillips Fox and the Attorney-General’s Department, *Digital Agenda Review*, September 2003 (Business Software Association of Australia and Business Software Alliance).

⁸⁹ Phillips Fox, above n 84, 109.

⁹⁰ *Ibid* 110.

⁹¹ The ‘permitted purposes’ identified in *Copyright Act 1968 (Cth)* s 116A(3).

⁹² Phillips Fox, above n 84, 111.

reasons for their rejection, stating only that they had been 'superseded' by the *AUSFTA* obligations.⁹³

2 *The Reaction to the AUSFTA*

The main proponents of the copyright provisions of the *AUSFTA* were the major content providers and owners of copyright material operating in publishing, music, film and computer software, supported by copyright collecting societies and industry think tank organisations such as the Australian Copyright Council.⁹⁴ These organisations represent the same interest groups who had substantial influence in the negotiation stages of the *AUSFTA*. One commentator remarked on the process of developing the *AUSFTA*:

While there was a space made for US government and particular global owner interests to assert their preferences, there was no corresponding respect for unwelcome Australian perspectives from civil society interest groups like the Electronic Frontiers Australia, Australian Digital Alliance, Australian Library and Information Association, local free software and open source advocates, IP academics, or even passing reference to the findings of the government's own IP expert committees.⁹⁵

Another noted that the IP chapter 'gives all the appearance of a United States shopping list.'⁹⁶

Reaction from the public and consumers of copyright material was uniformly negative. Electronic Frontiers Australia Inc opposed the IP chapter in its entirety, noting that the 'proposed circumvention device bans are overly strict and have more potential to be used as weapons against competition and innovation than for it.'⁹⁷ Linux Australia criticised the anti-circumvention provisions as overly broad, with exceptions which were restrictive and unclear.⁹⁸ The Australian Consumers' Association felt that

the prohibitions in the [*Digital Agenda Amendments*] currently go too far and extending such measures would intrude into consumers' lives excessively, particularly given the unresolved and potentially very broad definition of Technological Protection Measures (TPM).⁹⁹

The Australian Vice-Chancellors' Committee said the *AUSFTA* was 'very much pitched at the interests of copyright holders at the expense of users to such

⁹³ Australian Government, *Digital Agenda Review: Government Responses to Phillips Fox Recommendations and Related Matters* (2006) available at Attorney-General's Department, Australia <http://www.ag.gov.au/www/agd/agd.nsf/Page/Publications_ReviewofDigitalAgendaActreforms-April2003>.

⁹⁴ Rimmer, above n 75.

⁹⁵ Kathy Bowrey, *Law and Internet Cultures* (2005) 188.

⁹⁶ Christopher Arup, 'The United States–Australia Free Trade Agreement: The Intellectual Property Chapter' (2004) 15 *Australian Intellectual Property Journal* 205, 206.

⁹⁷ Submission to Senate Select Committee on the Free Trade Agreement between Australia and the United States of America, Parliament of Australia, 30 April 2004, Submission No 282, 16 (Electronic Frontiers Australia Inc).

⁹⁸ Submission to Senate Select Committee on the Free Trade Agreement between Australia and the United States of America, Parliament of Australia, Undated, Submission No 164, 12 (Linux Australia).

⁹⁹ Submission to Senate Select Committee on the Free Trade Agreement between Australia and the United States of America, Parliament of Australia, Undated, Submission No 522, 13 (Australian Consumers' Association).

an extent that it alters [the balance of copyright] very much in favour of owners.¹⁰⁰

The Joint Standing Committee on Treaties ('JSCOT') reviewed the *AUSFTA*, and, while they recommended the adoption of the *AUSFTA*, JSCOT made a number of recommendations concerning the IP chapter to address what they perceived as imbalances which the *AUSFTA* would create. JSCOT's recommendations included that:

- the Australian fair dealing exception to copyright be replaced with an open-ended exception modelled on the US 'fair use' defence;¹⁰¹
- the standard of originality required to obtain copyright protection be reviewed, with a view to adopting a higher standard such as that in the US,¹⁰² and
- the Australian Government ensure that exceptions will be available to allow for the use of parallel imported material and equipment.¹⁰³

The Government has not formally responded to these recommendations.

A Senate Select Committee then reviewed the *AUSFTA*, and its implementing legislation. The negotiation of the IP chapter has been characterised as a 'failure of sound and transparent policy making' which was 'far too detailed and will seriously hinder future IP policy making.'¹⁰⁴

The recommendations of Labor senators on the Senate Select Committee concurred with this assessment, stating their concern that

Australia entered into the Intellectual Property (IP) obligations of [the *AUSFTA*] in a manner that cut across established processes for copyright law reform and which did not appear to be part of a strategic vision of intellectual property.¹⁰⁵

They went on to make 13 recommendations relating to IP, including recommendations on fair use, the requisite standard of originality and parallel importation, which echoed the recommendation of the JSCOT report.¹⁰⁶ Like the recommendations made by the JSCOT report, the recommendations of the Labor senators were not taken up by the Government. Australia has until 1 January 2007 to implement its TPM obligations under the *AUSFTA*.¹⁰⁷

¹⁰⁰ Submission to Senate Select Committee on the Free Trade Agreement between Australia and the United States of America, Parliament of Australia, 29 April 2004, Submission No 336, 5 (Australian Vice-Chancellors' Committee).

¹⁰¹ Joint Standing Committee on Treaties, above n 79, 240.

¹⁰² *Ibid.*

¹⁰³ *Ibid.* 243.

¹⁰⁴ Submission to Senate Select Committee on the Free Trade Agreement between Australia and the United States of America, Parliament of Australia, 30 April 2004, Submission No 294, 3, 4 (Kimberlee Weatherall).

¹⁰⁵ Senate Select Committee on the Free Trade Agreement between Australia and the United States of America, Parliament of Australia, *Final Report* (2004) 229.

¹⁰⁶ *Ibid.* 230–2.

¹⁰⁷ Opened for signature 18 May 2004, [2005] ATS 1, art 17.12 (entered into force 1 January 2005).

E *Anti-Circumvention Litigation in the United States*

While Australia has had only one case considering its anti-circumvention laws, companies in the US were quick to embrace the equivalent provisions of the *DMCA*.¹⁰⁸ Many of these cases were not brought by copyright holders to enjoin ‘piracy’ of their digital works, but were instead arguably abuses of the law, brought to suppress lawful competition within markets.

1 Chamberlain

Chamberlain Group Inc (‘Chamberlain’) manufactured and sold garage door openers and wireless remote controls compatible with both their own garage door openers and those produced by other manufacturers (‘universal transmitters’).¹⁰⁹ Skylink Technologies Inc (‘Skylink’) also manufactured and sold universal transmitters, and was Chamberlain’s only significant competitor in the market for universal transmitters.¹¹⁰

Chamberlain developed a new model of garage door opener, which used a copyrighted ‘rolling code’ computer program to operate the garage door openers, purportedly as a security measure.¹¹¹ Users of this newer model garage door opener, incorporating the rolling code protection, were unable to use transmitters produced by companies other than Chamberlain. Skylink then began selling a new model of their universal transmitter, which, although it did not incorporate Chamberlain’s rolling code protection, could ‘trick’ Chamberlain’s newer garage door openers into operating.¹¹²

Chamberlain sued Skylink, claiming inter alia that both Chamberlain’s garage door openers and transmitters contained computer programs protected by copyright, that the rolling code system was a TPM which controlled access to those programs, and that Skylink’s universal transmitter was a circumvention device.¹¹³ Chamberlain’s motion for summary judgment on the *DMCA* claims was denied because of disputes of material fact, including whether Chamberlain’s rolling code software was a work protected by copyright.¹¹⁴ The United States District Court invited Skylink to file its own motion for summary judgment, seeking dismissal of the *DMCA* claims against them.¹¹⁵ This motion was later granted, with the Court holding that:

¹⁰⁸ An in-depth analysis of these cases is beyond the scope of this article. Instead, this article only discusses so much of these cases as is required to highlight both the reasoning of the US courts on the proper construction and operation of the *DMCA*, and the facts of the cases necessary to analyse how they might have fared under Australian law.

¹⁰⁹ *Chamberlain Group Inc v Skylink Technologies Inc*, 381 F 3d 1178, 1183 (Gajarsa J) (Fed Cir, 2004) (‘Chamberlain’).

¹¹⁰ *Ibid.*

¹¹¹ *Ibid.*

¹¹² *Ibid* 1184–5 (Gajarsa J).

¹¹³ *Ibid* 1185.

¹¹⁴ *Chamberlain Group Inc v Skylink Technologies Inc*, 292 F Supp 2d 1023, 1038, 1040 (Pallmeyer J) (ND Ill, 2003).

¹¹⁵ *Ibid* 1041.

- the burden of proof fell on Chamberlain to establish that Skylink circumvented a TPM (not, as Chamberlain argued, that Skylink must prove that it was authorised to circumvent the TPM);¹¹⁶ and
- Chamberlain never explicitly or implicitly restricted purchasers of their garage door openers from using universal transmitters produced by companies other than Chamberlain.¹¹⁷

The Court also observed that purchasers of Chamberlain's garage door openers have a reasonable expectation that they can replace their original Chamberlain transmitter with a competing universal transmitter without violating federal law.¹¹⁸

Chamberlain appealed against the dismissal of their *DMCA* claims to the Court of Appeals for the Federal Circuit. The Court of Appeals noted an underlying premise that

copyright laws authorize members of the public to *access* a work, but not to *copy* it. The law therefore places the burden of proof on the party attempting to establish that the circumstances of its case deviate from these normal expectations; defendants must prove authorized copying and plaintiffs must prove unauthorized access.¹¹⁹

The Court rejected the notion of an implied prohibition on access emanating merely from a lack of explicit authorisation.¹²⁰ It noted that adopting Chamberlain's construction of the *DMCA* would 'grant manufacturers broad exemptions from both the antitrust laws and the doctrine of copyright misuse'¹²¹ and 'allow virtually any company to attempt to leverage its sales into aftermarket monopolies.'¹²² Moreover, the Court found that the *DMCA* did not create a new de facto exclusive right of a copyright holder to regulate *access* to works protected by copyright (as Chamberlain in effect argued)¹²³ but, rather, that it merely prohibited 'forms of access that bear a reasonable relationship to the protections that the *Copyright Act* otherwise affords copyright owners.'¹²⁴

The Court of Appeals concluded that on its proper construction, the circumvention device prohibition in § 1201(a)(2) requires:

(1) ownership of a valid *copyright* on a work, (2) effectively controlled by a *technological measure*, which has been circumvented, (3) that third parties can now *access*, (4) *without authorization*, in a manner that (5) infringes or facilitates infringing a right *protected* by the *Copyright Act*, because of a product that (6) the defendant either (i) *designed or produced* primarily for circumvention; (ii) made available despite only *limited commercial significance*

¹¹⁶ Ibid 1044.

¹¹⁷ Ibid 1044–5.

¹¹⁸ Ibid 1046.

¹¹⁹ *Chamberlain*, 381 F 3d 1178, 1193 (Gajarsa J) (Fed Cir, 2004) (emphasis added).

¹²⁰ Ibid. See also Zohar Efroni, 'A Momentary Lapse of Reason: Digital Copyright, the *DMCA* and a Dose of Common Sense' (2005) 28 *Columbia Journal of Law and the Arts* 249, 256.

¹²¹ *Chamberlain*, 381 F 3d 1178, 1193 (Gajarsa J) (Fed Cir, 2004).

¹²² Ibid 1201 (Gajarsa J).

¹²³ Ibid 1192 (Gajarsa J).

¹²⁴ Ibid 1202 (Gajarsa J).

other than circumvention; or (iii) *marketed* for use in circumvention of the controlling technological measure.¹²⁵

Since Chamberlain had not shown a lack of authorisation,¹²⁶ as required by the fourth element, or the ‘critical nexus between access and protection’ required by the fifth element,¹²⁷ Skylink was entitled to summary judgment and the Court of Appeals affirmed the decision of the lower court.

It should also be noted that, had Chamberlain’s *DMCA* claims gone to trial, they may have been unable to establish a valid copyright on their rolling code software,¹²⁸ which would have also defeated their claim. For the purposes of Skylink’s motion for summary judgment, it was assumed that a valid copyright existed and this issue was not further explored. Most importantly, the Court of Appeals in this case limited the scope of the *DMCA*, by requiring a link to an actual or potential infringement of copyright (not merely the doing of an act which the copyright holder seeks to prohibit). Such a link is not required on the face of the law.

2 Lexmark

Many printer manufacturers sell their printers cheaply, and make most of their profits by charging a substantial mark-up on consumables (such as ink and toner cartridges used by their printers). This represents a modern adaptation of the classical business model of giving away razors and charging for the blades.

Lexmark International Inc (‘Lexmark’) was a major manufacturer of inkjet and laser printers, and ink and toner cartridges for those printers. New ‘genuine’ toner cartridges for laser printers were expensive and a secondary market had developed for refurbished or ‘remanufactured’ toner cartridges — that is, used genuine cartridges which have been cleaned, repaired and refilled with toner.

Lexmark adopted a policy of selling new toner cartridges under two different models. ‘Prebate’ cartridges were sold at a discounted price, but purported to impose a contractual obligation on the purchaser (by means of a ‘shrink-wrap’ agreement on the packaging) to use the cartridge only once, and then return the empty cartridge to Lexmark.¹²⁹ ‘Non-prebate’ cartridges were sold without the discount and without the limitation on reuse and return.¹³⁰ Both types of toner cartridge contained a microchip which communicated with the printer, for functions such as reporting the amount of toner remaining in the cartridge.¹³¹ The microchip also performed an authentication ‘handshake’ with the printer, designed to prevent the printer from operating with toner cartridges produced by anyone other than Lexmark.¹³² The authentication process would also prevent a

¹²⁵ Ibid 1203 (Gajarsa J) (emphasis in original).

¹²⁶ Ibid 1202 (Gajarsa J).

¹²⁷ Ibid 1204 (Gajarsa J).

¹²⁸ For reasons which will be discussed in the context of *Lexmark International Inc v Static Control Components Inc*, 387 F 3d 522 (6th Cir, 2004) (‘*Lexmark*’): see below nn 138–43 and accompanying text.

¹²⁹ Ibid 530 (Sutton J).

¹³⁰ Ibid.

¹³¹ Ibid 529–30 (Sutton J).

¹³² Ibid 530.

prebate cartridge from operating if it had been refilled by anyone other than Lexmark or their authorised agents.¹³³

Static Control Components Inc ('SCC') produced a range of technology products, including products used in the remanufacturing of inkjet and toner cartridges produced by Lexmark and other companies. One of these products, the 'SMARTEK' chip, was a replacement for the microchip in Lexmark toner cartridges. It allowed prebate cartridges with the replacement SMARTEK chip to be refilled by companies other than Lexmark or their authorised agents and still be used with Lexmark printers.¹³⁴ These remanufactured cartridges were then sold to consumers as a low cost alternative to the new Lexmark cartridges.¹³⁵ The SMARTEK chip contained a verbatim copy of a tiny piece of software in the Lexmark chip, known as the Toner Loading Program ('TLP').¹³⁶

Lexmark sued SCC, claiming that:

- 1 SCC's reproduction of the TLP on their SMARTEK chip was a violation of copyright;
- 2 SCC violated the *DMCA* by selling a product that circumvents access controls on the TLP; and
- 3 SCC violated the *DMCA* by selling a product that circumvents access controls on the software located within the printer (the 'Printer Engine Program').

Following an evidentiary hearing, the District Court decided that Lexmark had shown a likelihood of success on each claim and entered a preliminary injunction against SCC.¹³⁷ SCC appealed that decision to the Court of Appeals for the Sixth Circuit.

First, the Court of Appeals considered whether the TLP was copyrightable. Under US law, copyright protection only extends to the original *expression* of an idea, as opposed to the underlying idea itself, or to the functional or factual aspects of the work.¹³⁸ Copyright protection does not extend to 'any idea, procedure, process, system, method of operation, concept, principle or discovery, regardless of [its] form.'¹³⁹

In the Court's opinion, '[g]enerally speaking, "lock-out" codes fall on the functional-idea rather than the original-expression side of the copyright line' and that '[t]o the extent compatibility requires that a particular code sequence be included in the component device to permit its use, the merger and *scenes a faire* doctrines generally preclude the code sequence from obtaining copyright

¹³³ Ibid.

¹³⁴ Ibid 530–1.

¹³⁵ Ibid 530.

¹³⁶ Ibid. As noted by the Court of Appeals, the TLP is so small that the phrase 'Lexmark International, Inc vs Static Control Components, Inc' in ASCII format would occupy more memory than the TLP itself: at 529–30 (Sutton J).

¹³⁷ *Lexmark International Inc v Static Control Components Inc*, 253 F Supp 2d 943 (D Ky, 2003).

¹³⁸ *Sega Enterprises Ltd v Accolade Inc*, 977 F 2d 1510, 1524 (Reinhardt J) (9th Cir, 1992).

¹³⁹ *DMCA*, 17 USC § 102(b) (1998).

protection',¹⁴⁰ citing authorities involving interoperability issues in the context of computer games.¹⁴¹

The Court held that, as functionality and efficiency constraints precluded any material changes to the TLP,¹⁴² and because it was almost impossible to change the TLP without breaking the authentication handshake,¹⁴³ the TLP functioned as a lock-out code and was not copyrightable. Therefore, Lexmark's copyright infringement claim was dismissed.

This finding rendered moot a fair use defence which was raised by SCC and rejected by the District Court. However the Court of Appeals chose to comment on the lower court's reasoning in rejecting that defence.¹⁴⁴ The fair use defence comprises a four-factor test:

- 1 the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;
- 2 the nature of the copyrighted work;
- 3 the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and
- 4 the effect of the use upon the potential market for or value of the copyrighted work.¹⁴⁵

The District Court had held that the first, third and fourth factors weighed heavily in favour of Lexmark, and that the second favoured SCC only slightly.¹⁴⁶ The Court of Appeals disagreed with the lower court's reasoning on the first and fourth elements. While acknowledging that a profit-making purpose generally militates against a finding of fair use,¹⁴⁷ it is not the case that *any* profit-making purpose weighs against fair use, as the crux of this factor 'is not whether the sole motive of the use is monetary gain' — the question is whether 'the user stands to profit from exploitation of the *copyrighted material* without paying the customary price.'¹⁴⁸ The Court of Appeals held that, on the evidence before it, it was far from clear that SCC had copied the TLP to exploit the TLP itself, preferring the view that SCC had copied the TLP merely to permit refilled prebate cartridges to function with Lexmark's printers.¹⁴⁹

On the fourth factor, the Court of Appeals held that the lower court had erred in considering the effect of SCC's copying on the market for toner cartridges and should have instead considered the effect on the market for the *copyrighted work* — that is, the market for TLPs.¹⁵⁰ Any harm to Lexmark's market for toner

¹⁴⁰ *Lexmark*, 387 F 3d 522, 536 (Sutton J) (6th Cir, 2004).

¹⁴¹ *Sega Enterprises Ltd v Accolade Inc*, 977 F 2d 1510, 1524 (Reinhardt J) (9th Cir, 1992); *Atari Games Corp v Nintendo of America Inc*, 18 USPQ (2d) (BNA) 1935 (ND Cal, 1991).

¹⁴² *Lexmark*, 387 F 3d 522, 539 (Sutton J) (6th Cir, 2004).

¹⁴³ *Ibid* 541–2 (Sutton J).

¹⁴⁴ *Ibid* 544 (Sutton J).

¹⁴⁵ *DMCA*, 17 USC § 107 (1998).

¹⁴⁶ *Lexmark International Inc v Static Control Components Inc*, 253 F Supp 2d 943, 960–2 (Forester CJ) (D Ky, 2003).

¹⁴⁷ *Lexmark*, 387 F 3d 522, 544 (Sutton J) (6th Cir, 2004).

¹⁴⁸ *Harper & Row, Publishers Inc v Nation Enterprises*, 471 US 539, 562 (O'Connor J) (1985), cited in *Lexmark*, 387 F 3d 522, 544 (Sutton J) (6th Cir, 2004) (emphasis added).

¹⁴⁹ *Lexmark*, 387 F 3d 522, 544 (Sutton J) (6th Cir, 2004).

¹⁵⁰ *Ibid* 544–5.

cartridges or prebate programme was not relevant as ‘that is not the sort of market or value that copyright law protects.’¹⁵¹

Lexmark’s *DMCA* claims fared no better than their copyright claim. The Printer Engine Program software resides in the unprotected, unencrypted memory of the laser printer, and can be freely copied from that memory.¹⁵² The *DMCA* requires that a technical measure must *effectively* control access¹⁵³ and does ‘not extend to a technological measure that restricts one form of access but leaves another route wide open.’¹⁵⁴ Their *DMCA* claim relating to protection of the Printer Engine Program failed for this reason.

The *DMCA* claim concerning protection of the TLP failed because the SMARTEK chip did not provide ‘access’ to the TLP; rather it was a *replacement* for the TLP.¹⁵⁵

As Lexmark failed to establish a likelihood of success on any of its claims, the Court of Appeals vacated the preliminary injunction against SCC and remanded the case to the District Court for further proceedings.¹⁵⁶

In effect, the object of Lexmark’s *DMCA* claims was not to prevent infringement of their copyrighted work — it was to prevent competitors from supplying cheaper cartridges for use with Lexmark’s printers.

3 StorageTek

Tape silos are large and expensive devices used by computer systems and servers to store massive amounts of computer data. They are typically used in large corporate environments such as banks and telecommunications carriers to support the operation of mission-critical computer systems such as mainframe computers. The reliability and constant availability of these silo systems are critical for the businesses that employ them. Tape silo failures are extremely destructive and costly, and there is a significant market for the service and maintenance of the silos.

StorageTek produced and sold tape silos, and also provided maintenance services and parts for their silos. StorageTek silos operated using computer software contained within them, which was divided into software that operated the silo system (‘Functional Code’) and software for the maintenance of the system (‘Maintenance Code’).¹⁵⁷ The Maintenance Code, if activated, produced error messages (‘fault symptom codes’) concerning the operation of the silos which were necessary to diagnose faults with the silos and properly service them. When StorageTek sold a silo, it contained both the Functional Code and the Maintenance Code, but the customer was only licensed to use the Functional Code. Although both types of code were loaded into memory when a silo booted, the Maintenance Code was normally disabled and could only be enabled or

¹⁵¹ Ibid 545.

¹⁵² Ibid 546–7 (Sutton J).

¹⁵³ *DMCA*, 17 USC § 1201(a)(2) (1998) (emphasis added).

¹⁵⁴ *Lexmark*, 387 F 3d 522, 547 (Sutton J) (6th Cir, 2004).

¹⁵⁵ Ibid 563 (Sutton J).

¹⁵⁶ Ibid 551 (Sutton J).

¹⁵⁷ *Storage Technology Corporation d/b/a StorageTek v Custom Hardware Engineering & Consulting Inc*, No 02-12102-RWZ, 2004 US Dist LEXIS 12391 (D Mass, 2004) (‘*StorageTek*’).

activated by use of a special password used with a proprietary algorithm called 'GetKey'.

Custom Hardware Engineering & Consulting Inc ('CHE') was an independent business that repaired tape silos produced by StorageTek. In order to diagnose problems with the silos, CHE would circumvent the GetKey password system to enable the Maintenance Code and intercept and interpret the fault symptom codes produced by it. As part of this process, CHE would reboot the tape silos, causing both the Functional Code and Maintenance Code to be copied into the memory of the silo.

StorageTek sued CHE, alleging inter alia that by rebooting the silos and causing the Maintenance Code to be copied into the memory as a normal part of the booting process, CHE had infringed StorageTek's copyright in the Maintenance Code. StorageTek further alleged that CHE's circumvention of the GetKey password system to activate the Maintenance Code violated the *DMCA*. CHE counterclaimed, alleging inter alia that StorageTek had engaged in illegal monopolisation and tying under §§ 1–2 of the *Sherman Act*.¹⁵⁸

StorageTek sought a preliminary injunction to restrain CHE from circumventing GetKey and using the Maintenance Code to diagnose faults with the tape silos. CHE relied on several defences to StorageTek's claims, including a specific exception in the US *DMCA* to facilitate the repair and maintenance of computer systems.¹⁵⁹

This exception, set out in 17 USC § 117(c) (1998), provides that:

it is not an infringement for the owner or lessee of a machine to make or authorize the making of a copy of a computer program if such copy is made solely by virtue of the activation of a machine that lawfully contains an authorized copy of the computer program, for purposes only of maintenance or repair of that machine, if —

- (1) such new copy is used in no other manner and is destroyed immediately after the maintenance or repair is completed; and
- (2) with respect to any computer program or part thereof that is not necessary for that machine to be activated, such program or part thereof is not accessed or used other than to make such new copy by virtue of the activation of the machine.

CHE argued many other defences, including that they enjoyed the benefits of their customers' licences to copy the code into memory in order to activate the tape silos, and that their copying was fair use.

The District Court characterised CHE's conduct as free-riding on StorageTek's investment in producing the Maintenance Code¹⁶⁰ and, finding that StorageTek had demonstrated a substantial likelihood of success, granted a preliminary injunction.¹⁶¹ CHE appealed from that decision to the United States Court of Appeals.

¹⁵⁸ 15 USC §§ 1–2 (2000 & Supp IV, 2004).

¹⁵⁹ *DMCA*, 17 USC § 117(c) (1998). The closest equivalent under the *Copyright Act 1968* (Cth) is s 47B.

¹⁶⁰ *StorageTek*, No 02-12102-RWZ, 2004 US Dist LEXIS 12391, [*18] (Zobel J) (D Mass, 2004).

¹⁶¹ *Ibid*.

The Court of Appeals held that the District Court had misconstrued the § 117(c) exception¹⁶² by focusing on the purpose of ‘repair’ while ignoring the wider definition of ‘maintenance’ within the statute.¹⁶³ The Court noted that the extrinsic materials supported a reading of ‘maintenance’ which encompassed the ongoing monitoring of systems for problems, and the policy underlying § 117(c) was ‘to ensure that independent service organizations do not inadvertently become liable for copyright infringement merely because they have turned on a machine in order to service its hardware components.’¹⁶⁴

The Court concluded that CHE was likely to succeed on the § 117(c) defence. The Court also held that CHE was likely to succeed on their argument that, as an agent of the silo owner, it was protected by the silo owner’s licence to copy the software to boot the silo.¹⁶⁵

Turning to the *DMCA* claims, the Court held that under the reasoning in *Chamberlain*, to the extent CHE’s activities did not constitute copyright infringement, StorageTek could not maintain an action under the *DMCA*.¹⁶⁶ As in *Chamberlain*, there was not a sufficient nexus between the circumvention complained of and the rights protected by copyright law.¹⁶⁷

After disposing of a related trade secret issue, the Court of Appeals concluded that the District Court had erred in law when considering StorageTek’s copyright and *DMCA* claims, and that it had overlooked material factors in its analysis of the *DMCA* and trade secret claims.¹⁶⁸ Furthermore, the Court of Appeals held that the District Court had abused its discretion in granting the preliminary injunction, which was vacated, and remanded the case for further proceedings.¹⁶⁹

The District Court later granted summary judgment to CHE on the copyright and *DMCA* claims against them.¹⁷⁰

4 The bnetd Case

Davidson & Associates Inc, trading as Blizzard Entertainment (‘Blizzard’), created and sold computer games. Many of these games could be played against other players over the internet, using a service supplied by Blizzard known as ‘Battle.net’. When a user connected to the Battle.net service, Battle.net would carry out a ‘secret handshake’ with the user’s game, performing certain checks in

¹⁶² *Storage Technology Corporation (doing business as StorageTek) v Custom Hardware Engineering & Consulting Inc*, 421 F 3d 1307, 1312 (Bryson J) (Fed Cir, 2005).

¹⁶³ *DMCA*, 17 USC § 117(d) (1998) reads: ‘the restoring of the machine to the state of working in accordance with its original specifications and any changes to those specifications authorized for that machine’, with ‘maintenance’ defined as ‘the servicing of the machine in order to make it work in accordance with its original specifications and any changes to those specifications authorized for that machine’.

¹⁶⁴ *Committee Report on WIPO Copyright Treaties Implementation and On-Line Copyright Infringement Liability Limitation*, H R Rep No 105-551(1), 27 (1998), cited in *Storage Technology Corporation (doing business as StorageTek) v Custom Hardware Engineering & Consulting Inc*, 421 F 3d 1307, 1311–12 (Bryson J) (Fed Cir, 2005).

¹⁶⁵ *Storage Technology Corporation (doing business as StorageTek) v Custom Hardware Engineering & Consulting*, 421 F 3d 1307, 1317 (Bryson J) (Fed Cir, 2005).

¹⁶⁶ *Ibid* 1318 (Bryson J).

¹⁶⁷ *Ibid* 1319 (Bryson J).

¹⁶⁸ *Ibid* 1321 (Bryson J).

¹⁶⁹ *Ibid*.

¹⁷⁰ *Storage Technology Corporation v Custom Hardware Engineering & Consulting Ltd*, No 02-12102-RWZ, 2006 US Dist LEXIS 43690 (D Mass, 2006).

an attempt to prevent the use of infringing copies of the Blizzard games with the Battle.net service.

For various reasons, many users of the Battle.net service became dissatisfied with the quality and reliability of Battle.net, and sought to develop an alternative service. Tim Jung and others collaborated to develop an open-source software project named 'bnetd' which interoperated with the Blizzard games and offered online gaming functionality similar to the Battle.net service. By necessity, the developers of bnetd used reverse engineering techniques to obtain information necessary to produce the bnetd software. However, as the bnetd developers did not have access to the information necessary to emulate the secret handshake and perform the anti-infringement tests, the bnetd software omitted these tests, consequentially allowing the use of potentially infringing copies of games with the bnetd software.

Blizzard sued Jung and other parties involved with the bnetd project, claiming inter alia that they had infringed Blizzard trademarks and copyrights, breached the End User Licence Agreements ('EULA') under which the games were published, breached the Battle.net terms of use ('TOU'), and that bnetd was a circumvention device.

Early in the case, the District Court entered a consent decree which resolved many of the claims made against the defendants. In the consent decree, the defendants agreed that they had incorporated copyrighted materials created by Blizzard into the bnetd software without authorisation. The parties agreed that the remaining claims, including breach of the EULA and TOU, and the *DMCA* claims, would be resolved by the Court on the parties' existing motions for summary judgment.¹⁷¹

The TOU provided inter alia that users of the games must not 'reverse engineer ... disassemble or de-compile in whole or in part any Battle.net software', 'host or provide [online gaming services] for any Blizzard software programs or emulate or redirect the communication protocols used by Blizzard as part of Battle.net' or 'use Blizzard's intellectual property rights contained in Battle.net to create or provide any other means through which Blizzard entertainment software products ... may be played by others, including, not limited to, server emulators.'¹⁷² The EULA also contained a prohibition on reverse engineering.¹⁷³

Although it is well-established that reverse engineering of computer software can be protected as fair use,¹⁷⁴ US courts have held that reverse engineering can be prohibited by contract.¹⁷⁵ Since the defendants had previously agreed to the 'click-wrap' EULA and TOU agreements which prohibited reverse engineering,

¹⁷¹ *Davidson & Associates Inc v Internet Gateway*, 334 F Supp 2d 1164, 1167 (Shaw J) (D Mo, 2004).

¹⁷² *Ibid* 1171 (Shaw J).

¹⁷³ *Ibid*.

¹⁷⁴ *Bowers (doing business as HLB Technology) v Baystate Technologies Inc*, 320 F 3d 1317, 1325 (Rader J) (Fed Cir, 2003) ('*Bowers v Baystate Technologies*'); *Sony Computer Entertainment Inc v Connectix Corporation*, 203 F 3d 596, 602 (Canby J) (9th Cir, 2000); *Sega Enterprises Ltd v Accolade Inc*, 977 F 2d 1510 (9th Cir, 1993).

¹⁷⁵ '[P]rivate parties are free to contractually forego the limited ability to reverse engineer a software product under the exemptions of the *Copyright Act*.': *Bowers v Baystate Technologies*, 320 F 3d 1317, 1325-6 (Rader J) (Fed Cir, 2003).

the District Court held they had waived their fair use right to reverse-engineer the software.¹⁷⁶ The Court also held that because bnetd circumvented the Battle.net secret handshake, it was a circumvention device within the meaning of the *DMCA* and that the reverse engineering exception in the *DMCA* did not apply.¹⁷⁷

The defendants appealed from this decision to the US Court of Appeals for the Eighth Circuit, which affirmed the decision of the District Court.¹⁷⁸

F Comparative Copyright Law Analysis

US copyright law differs from that of Australia in a number of important respects. In our opinion, divergence will continue even after the *AUSFTA* is fully implemented. Many of these differences will be problematic for producers of interoperable products. In this section, we consider the IP law issues raised in the US cases considered in the preceding section and how those issues would be dealt with under Australian copyright law.

1 *The Standard of Originality and the Protection of Functional Elements*

As the decision of the Court of Appeals in *Lexmark* demonstrates, US copyright law protects only works with a ‘creative spark’ or ‘minimal degree of creativity’¹⁷⁹ and will not protect the functional aspects of computer software. Well-established doctrines of merger¹⁸⁰ and *scenes à faire*¹⁸¹ are ‘staples of copyright law’ used to ascertain the ‘elusive boundary line’ between idea and expression.¹⁸²

The threshold for obtaining copyright protection in Australia is significantly lower: it merely requires ‘labour and expense’ or ‘industrious collection’.¹⁸³ As an example, compilations of factual information such as telephone directories are protected by copyright in Australia,¹⁸⁴ but not in the United States.¹⁸⁵

The *Copyright Act 1968* (Cth) defines ‘computer program’ as ‘a set of statements or instructions to be used directly or indirectly in a computer in order

¹⁷⁶ *Davidson & Associates Inc v Internet Gateway*, 334 F Supp 2d 1164, 1181 (Shaw J) (D Mo, 2004).

¹⁷⁷ *Ibid* 1184–5 (Shaw J).

¹⁷⁸ *Davidson & Associates, doing business as Blizzard Entertainment Inc v Jung*, 422 F 3d 630 (8th Cir, 2005) (‘*bnetd Case*’).

¹⁷⁹ *Feist Publications Inc v Rural Telephone Service Co Inc*, 499 US 340, 345 (O’Connor J) (1991).

¹⁸⁰ Where the ‘expression is essential to the statement of the idea’, or where there is only one way or very few easy ways of expressing the idea, the idea and expression are said to have ‘merged’: *Lexmark*, 387 F 3d 522, 535 (Sutton J) (6th Cir, 2004) (citations omitted). In these instances, copyright protection does not exist because granting protection to the expressive component of the work would necessarily extend protection to the work’s uncopyrightable ideas as well: at 535.

¹⁸¹ Where external factors constrain the choice of expressive vehicle, the doctrine of *scenes à faire* precludes copyright protection. In the computer software context, the doctrine means that the elements of a program dictated by practical realities — for example, by hardware standards and mechanical specifications, software standards and compatibility requirements, computer manufacturer design standards, target industry practices and standard computer programming practices — may not obtain protection: *ibid*.

¹⁸² *Ibid*.

¹⁸³ *Desktop Marketing Systems Pty Ltd v Telstra Corporation Ltd* (2002) 119 FCR 491.

¹⁸⁴ *Ibid*.

¹⁸⁵ *Feist Publications Inc v Rural Telephone Service Co Inc*, 499 US 340 (1991).

to bring about a certain result¹⁸⁶ and computer programs are protected as literary works.¹⁸⁷

As applied to computer software, the High Court of Australia held that the verbatim copying of 127 bits¹⁸⁸ of computer data — an amount less than half the size of the Lexmark TLP — infringed the copyright which subsisted in the program from which it was copied.¹⁸⁹ Under Australian law, it is highly likely that the TLP at issue in *Lexmark* would be protected by copyright. By reproducing the TLP, SCC would have infringed Lexmark's copyright in the program, unless a defence was available to them.

The *Digital Agenda Amendments*, the *DMCA*, and the *AUSFTA* all require that a TPM must protect a work *in which copyright subsists*. Subtle differences in the scope of copyright protection for computer code (especially functional codes used to facilitate technological lock-outs) will be critical in determining the legality of steps taken to create interoperable products.

2 *The Scope of Fair Use/Dealing Exceptions*

The copyright exception for 'fair use' copying which exists in the United States has no exact equivalent under Australian law. Fair use is an 'open-ended' defence, and as seen in the decision of the Court of Appeals in *Lexmark*, although a commercial or profit-making purpose weighs against the application of a fair use defence, it does not preclude it completely.¹⁹⁰

Australian copyright law instead recognises a purpose-based 'fair dealing' exception, permitting limited copying *only* for the purposes of:

- 1 research or study;¹⁹¹
- 2 criticism or review;¹⁹²
- 3 news reporting;¹⁹³ and
- 4 judicial proceedings or obtaining legal advice.¹⁹⁴

Any copying other than for these purposes (for example, for commercial purposes, or for reverse engineering to produce interoperable products) cannot fall within the fair dealing exception, and a defendant would have to rely on a more specific exception such as that in s 47D of the *Copyright Act 1968* (Cth).

¹⁸⁶ *Copyright Act 1968* (Cth) s 10(1).

¹⁸⁷ *Copyright Act 1968* (Cth) ss 10(1), 31(1).

¹⁸⁸ A 'bit' is the smallest unit of computer data, representing a binary one or zero. Eight bits make one 'byte', which at its most basic level can represent one letter of the alphabet. This footnote is approximately 320 bytes long, or 20 times larger than the copied code in *Autodesk Inc v Dyason [No 1]* (1992) 173 CLR 330.

¹⁸⁹ *Autodesk Inc v Dyason [No 1]* (1992) 173 CLR 330. This case is also interesting in that the infringing copying was in the context of producing a device that would almost certainly be alleged to be a circumvention device under modern anti-circumvention laws.

¹⁹⁰ See above nn 144–9 and accompanying text.

¹⁹¹ *Copyright Act 1968* (Cth) ss 40, 103A.

¹⁹² *Copyright Act 1968* (Cth) ss 41, 103B.

¹⁹³ *Copyright Act 1968* (Cth) ss 42, 103C.

¹⁹⁴ *Copyright Act 1968* (Cth) ss 43, 104.

3 The Interoperability Exception — Section 47D

In the United States, reverse engineering to produce interoperable products has been held to be fair use,¹⁹⁵ but is not otherwise specifically protected at law. In Australia, s 47D of the *Copyright Act 1968* (Cth) provides:

- (1) Subject to this Division, the copyright in a literary work that is a computer program is not infringed by the making of a reproduction or adaptation of the work if:
 - (a) the reproduction or adaptation is made by, or on behalf of, the owner or licensee of the copy of the program (the original program) used for making the reproduction or adaptation; and
 - (b) the reproduction or adaptation is made *for the purpose of obtaining information* necessary to enable the owner or licensee, or a person acting on behalf of the owner or licensee, *to make independently another program* (the new program), *or an article, to connect to and be used together with, or otherwise to interoperate with*, the original program *or any other program*; and
 - (c) the reproduction or adaptation is made only to the extent reasonably necessary to obtain the information referred to in paragraph (b); and
 - (d) to the extent that the new program reproduces or adapts the original program, it does so only to the extent necessary to enable the new program to connect to and be used together with, or otherwise to interoperate with, the original program or the other program; and
 - (e) the information referred to in paragraph (b) is not readily available to the owner or licensee from another source when the reproduction or adaptation is made.¹⁹⁶

This exception was inserted by the *Copyright Amendment (Computer Programs) Act 1999* (Cth) and has yet to be judicially considered. However, it is doubtful whether the conduct of SCC in *Lexmark* would benefit from this section.

On the other hand, it could be argued that SCC's verbatim reproduction of the TLP in their SMARTEK chips was 'to make independently another ... article [the SMARTEK chips], to connect to and be used together with, or otherwise to interoperate with ... any other program [the software in the Lexmark printers].'¹⁹⁷ The requirement that the reproduction be made 'for the purpose of obtaining information'¹⁹⁸ may be more problematic. It could perhaps be argued that in *Lexmark*, the 'information necessary' was the TLP itself.

We consider that s 47D, read as a whole, deals with copying and adaptation by way of reverse engineering and would not extend to a verbatim reproduction of the original, even where it was the only way to achieve interoperability. Although the title of the provision, 'Reproducing Computer Programs To Make Interoperable Products', may support a wider construction, the extrinsic materials do not.

¹⁹⁵ See *Bowers v Baystate Technologies*, 320 F 3d 1317, 1325 (Rader J) (Fed Cir, 2003); *Sony Computer Entertainment Inc v Connectix Corporation*, 203 F 3d 596, 602 (Canby J) (9th Cir, 2000); *Sega Enterprises Ltd v Accolade Inc*, 977 F 2d 1510 (9th Cir, 1993).

¹⁹⁶ *Copyright Act 1968* (Cth) s 47D (emphasis added).

¹⁹⁷ *Copyright Act 1968* (Cth) s 47D(1)(b).

¹⁹⁸ *Copyright Act 1968* (Cth) s 47D(1)(b).

The Explanatory Memorandum for the Copyright Amendment (Computer Programs) Bill 1999 (Cth) states that:

New s 47D exempts from infringement the reproduction of a program in the course of finding out how it interfaces with other programs, if done for the purpose of independently creating an [sic] interoperable software or other product and if the information is not already available.¹⁹⁹

The Second Reading Speech talks of the need for an exception to ensure that ‘decompilation’ (a technical process often used in reverse engineering computer software) to create interoperable products is permitted, and the Minister responsible stated that:

the change to allow decompilation in the circumstances I have described will ensure that only interface information may be discovered and that this information may be used only for the purpose of making an interoperable product. This limited sanctioning of decompilation will not weaken the existing proscription of software piracy.²⁰⁰

The s 47D exception would seem to be confined to copying necessary for reverse engineering and would not extend to verbatim copying of original software, even where this is the only way to achieve interoperability. By the use of check sums, digital signatures or other authentication mechanisms, companies could exploit this shortcoming of the exception. By following Lexmark’s approach and essentially making their software ‘reverse engineering-proof’, companies might be able to preclude competitors from developing interoperable products.

Section 47H provides that certain exceptions (including the reverse engineering exception in s 47D) cannot be excluded or limited by agreement.²⁰¹ This protection is essential, as almost every licence agreement or EULA for commercial technology products purports to prohibit reverse engineering, which would render the s 47D exception essentially ineffective — as was clearly demonstrated in the *bnetd Case*.²⁰²

This is one of the few areas where Australian copyright law is more conducive to the production of interoperable technology products than US law.

4 *Contractual Restrictions on the Use of Interoperable Products*

Some licence agreements purport to restrict the use of competing products or services. For example, the Apple iTunes Music Store terms of service provide that the user ‘will not access the Service by any means other than through software that is provided by iTunes for accessing the Service’ and requires the use of ‘authorised’ digital player devices.²⁰³

¹⁹⁹ Explanatory Memorandum, Copyright Amendment (Computer Programs) Bill 1999 (Cth) 2.

²⁰⁰ Commonwealth, *Parliamentary Debates*, House of Representatives, 11 August 1999, 8480 (Daryl Williams, Attorney-General).

²⁰¹ *Copyright Act 1968* (Cth) s 47H provides: ‘An agreement, or a provision of an agreement, that excludes or limits, or has the effect of excluding or limiting, the operation of ... section ... 47D ... has no effect.’

²⁰² 422 F 3d 630 (8th Cir, 2005). See *Davidson & Associates Inc v Internet Gateway*, 334 F Supp 2d 1164 (D Mo, 2004).

²⁰³ Apple Computer Australia, *iTunes Store Terms of Service* (2006) cls 8(b), 9(a) <<http://www.apple.com/legal/itunes/au/service.html>>.

If these terms 'exclude or limit, or have the effect of excluding or limiting' the operation of s 47D, they would have no effect, under s 47H, against a person undertaking reverse engineering to *produce* an interoperable product. However, these terms *would* be binding on *users* of the original product, who wished to use the competing interoperable product. Although s 47H protects the *producers* of interoperable products, it fails to protect the *users* of such products. The inclusion of such contractual conditions may constitute exclusive dealing under s 47(2) of the *TPA*, and will be examined later in this article.²⁰⁴

5 Circumventing TPMs To Produce Interoperable Products

As the law currently stands,²⁰⁵ while commercial dealings with circumvention devices are prohibited,²⁰⁶ the *use* of circumvention devices and the actual circumvention of TPMs are not prohibited. The implementation of the remaining anti-circumvention provisions of the *AUSFTA* will change this situation by 1 January 2007,²⁰⁷ but an exception may be available for

non-infringing reverse engineering activities with regard to a lawfully obtained copy of a computer program, carried out in good faith with respect to particular elements of that computer program that have not been readily available to the person engaged in those activities, for the sole purpose of achieving interoperability of an independently created computer program with other programs.²⁰⁸

The legislation implementing these provisions of the *AUSFTA* has not yet been released.

6 Interoperable Products May Be Prohibited as 'Circumvention Devices'

Under the *Digital Agenda Amendments*, a 'circumvention device' is defined as:

a device (including a computer program) having only a limited commercially significant purpose or use, or no such purpose or use, other than the circumvention, or facilitating the circumvention, of an [sic] technological protection measure.²⁰⁹

Whether any given interoperable product falls within this definition is a question of fact and will depend on the nature and purpose of the product itself. It is likely that products whose main purpose is bypassing a TPM to facilitate interoperability (such as copying TPM-protected Apple iTunes music to a non-Apple portable player) will be found to be a circumvention device.

Additionally, because the definition tests for a 'commercially significant purpose or use,' there is a risk to products, such as open-source computer software, which are distributed for free or on non-commercial terms. It may be

²⁰⁴ See below Part III(C).

²⁰⁵ This article was written in mid-2006, before the introduction of the legislation implementing the remaining TPM provisions of the *AUSFTA*.

²⁰⁶ *Copyright Act 1968* (Cth) s 116A(1).

²⁰⁷ *AUSFTA*, opened for signature 18 May 2004, [2005] ATS 1, art 17.4.7(a)(i) (entered into force 1 January 2005).

²⁰⁸ *Ibid* art 17.4.7(e)(i).

²⁰⁹ *Copyright Act 1968* (Cth) s 10(1). See further above n 42.

that any open-source software which circumvents a TPM will be prohibited as a circumvention device for this reason.

While the *AUSFTA* does not use the term ‘circumvention device’, its equivalent provisions deal with devices (including software) or services that:

- (A) are promoted, advertised, or marketed for the purpose of circumvention of any effective technological measure;
- (B) have only a limited commercially significant purpose or use other than to circumvent any effective technological measure; or
- (C) are primarily designed, produced, or performed for the purpose of enabling or facilitating the circumvention of any effective technological measure.²¹⁰

The scope of these provisions is considerably wider than the definition of ‘circumvention device’ under the current *Copyright Act 1968* (Cth). An interoperable product would not currently be a circumvention device if it has a commercially significant purpose or use other than circumvention of a TPM.

Under the *AUSFTA*, the same product might be a circumvention device merely because it was ‘promoted, advertised, or marketed’ for the purpose of circumvention, or designed or produced to facilitate circumvention.

A literal reading of the *AUSFTA* would require that any device advertised for the purpose of circumvention be prohibited as a circumvention device, even where the device is not, in fact, capable of circumventing a TPM.

7 *Circumvention Devices May Only Be Made for Limited Purposes*

Under the *Digital Agenda Amendments*, circumvention devices may only be made or imported:

- (a) for use only for a permitted purpose relating to a work or other subject-matter that is not readily available in a form that is not protected by a technological protection measure; or
- (b) for the purpose of enabling a person to supply the device, or to supply a circumvention service, for use only for a permitted purpose.²¹¹

A circumvention device is taken to be used for a permitted purpose only if:

- (a) the device ... is used for the purpose of doing an act comprised in the copyright in a work or other subject-matter; and
- (b) the doing of the act is not an infringement of the copyright in the work or other subject matter under section 47(D) ...²¹²

It seems then that a circumvention device may be lawfully made or imported to *facilitate* any reverse engineering necessary to produce interoperable products under s 47D, but cannot otherwise be lawfully made or imported to *achieve* interoperability by circumventing a TPM.

²¹⁰ Opened for signature 18 May 2004, [2005] ATS 1, art 17.4.7(b) (entered into force 1 January 2005).

²¹¹ *Copyright Act 1968* (Cth) s 116A(4).

²¹² *Copyright Act 1968* (Cth) s 116A(7). The other sections included in sub-s (b) are exceptions for error-correction and security testing of computer software, libraries and archives, educational institutions and for the services of the Crown.

8 *Circumvention Devices May Only Be Supplied to Limited Persons*

Circumvention devices may only be supplied to a person who is a 'qualified person', and if that person gives the supplier a lengthy declaration containing their name, address and justification for obtaining the device.²¹³

'Qualified person', in the context of the production of interoperable products, means a person referred to in s 47D(1)(a) — that is, the owner or licensee, or their agent, of a copy of the original computer software, who performs the reverse engineering permitted by that section.²¹⁴

Like the exceptions for making and importing circumvention devices, the exceptions for supplying circumvention devices facilitate the *making* of interoperable products. However, if the interoperable products themselves constitute a circumvention device, they do not allow the *supply* of those products.

9 *Excludability of Circumvention Device Exceptions*

Unlike the reverse engineering exception in s 47D of the *Copyright Act 1968* (Cth), the exceptions in s 116A, allowing the making, importation and supply of circumvention devices, are not protected by a provision analogous to s 47F. The effect of this is that a contractual prohibition on the making, importation or supply of circumvention devices will be effective, at least to the extent that it does not have the 'effect of excluding or limiting' an exception relating to computer software protected by s 47H.²¹⁵

10 *Summary*

Australian copyright law currently provides some exceptions to facilitate the production of interoperable products. However, these exceptions are very narrow and have not yet been judicially considered. At least some conduct identified in overseas precedents (for example, *Lexmark*) would seem to fall *outside* these exceptions.

The exceptions allow circumvention devices to be used to *create* interoperable products but, as a practical matter, do not allow interoperable products to *be* circumvention devices. Under the current law, care must be taken to give interoperable products a commercially significant purpose or use other than circumventing a TPM. Once implemented, the *AUSFTA* will impose an even greater constraint, including constraints on the marketing, advertising and design of interoperable products.

Anti-circumvention laws protect copyrighted material from infringement — anti-circumvention laws by design, copyright law as a result of a degree of judicial restraint in interpreting the relevant legislation. The scope of copyright protection, and the available defences and exceptions to infringement, will therefore define the overall scope of anti-circumvention protection.

²¹³ *Copyright Act 1968* (Cth) s 116A(3).

²¹⁴ *Copyright Act 1968* (Cth) s 47D(1)(a).

²¹⁵ The protected exceptions are *Copyright Act 1968* (Cth) ss 47B(3) (copies incidentally made for studying software), 47C (making backup copies), 47D (reverse engineering), 47E (error-correction), 47F (security testing).

The US has a high standard of originality, limited protection for functional computer software and a broad fair use defence. There is a very real danger that an anti-circumvention law which acts as an *infringement control* in the US will act as an *access control* if introduced into a jurisdiction with a low standard of originality and limited defences, such as Australia. The devil is well and truly in the detail, and much will depend on the exact wording of the legislation which will implement the *AUSFTA*-mandated changes.

III COMPETITION LAW AND ANTI-CIRCUMVENTION LAW

In this Part, we examine the competition law issues raised by the US cases canvassed in Part II(E) and consider how they would be dealt with under Australian competition law. *Lexmark* and *Chamberlain* demonstrate that DRM technology is being used (or misused) by companies — not to protect their IP rights, but in an attempt to hinder or preclude competition in aftermarkets. Owners of DRM technology can unilaterally refuse to license the technology to companies seeking to develop competing products. Such conduct could be challenged under Part IV of the *TPA*.

Not all practices facilitated by DRM are anti-competitive. DRM is used to enforce region-coding systems for the distribution of DVDs and PlayStation games. Region-coding facilitates geographic price discrimination, but price discrimination is common in industries with high fixed costs and low marginal costs, such as the production of motion pictures and computer software. Such discrimination can be economically efficient, and while it may be unpopular with consumers who are forced to pay higher prices, it is not prohibited as such under the *TPA*.

However, DRM can undermine competition. Part II(F)(3)–(10) discussed in depth how anti-circumvention laws can inhibit the development and sale of interoperable products where such products must circumvent a TPM in order to function.

The use of region-coding is another example of DRM undermining competition in the free market.²¹⁶ Copyright holders have zealously guarded their exclusive right to control importation of copyright material.²¹⁷ The Australian Government in the late 1990s decided on policy grounds to remove those rights for most categories of material.²¹⁸ The use of DRM and region-coding by copyright holders amounts to a de facto reintroduction of these rights, allowing copyright holders to eliminate arbitrage and charge monopoly prices in each discrete country. The copyright holders have used DRM technology to circumvent the Government's policy to allow parallel importation of many types of material. The Government has responded to this by announcing

²¹⁶ Note that just because a practice 'undermines competition' does not necessarily mean it will be 'anti-competitive' as such, or be prohibited by the *TPA*.

²¹⁷ See, eg, the placing of Australia on the USTR 'watch list' of countries with inadequate or ineffective IP protection: see above n 34 and accompanying text. See also IFAC-3, above n 76, 10.

²¹⁸ See above n 30 and accompanying text.

that they will remove anti-circumvention protection from DRM that enforces geographical market segmentation.²¹⁹

We will consider two broad categories of cases. The first category draws attention to the relationship between copyright and contract. The right to control use of or access to a work or other subject matter in which copyright subsists is not one of the exclusive rights comprised within copyright. However, this has not prevented copyright owners from using contracts²²⁰ to impose restrictions on use and access of digital material, and using DRM to enforce those restrictions.

These restrictions often go beyond the exclusive rights granted to copyright holders. The terms of such contracts are almost universally on a 'take it or leave it' basis, notwithstanding the contract law notion that a contract is a voluntary bargain between two parties. Consumers (and competitors) have no choice but to accept the imposition of restrictive conditions in licences if they want access to content.

Lexmark falls into this category. It will be recalled that the prebate cartridges were sold in packaging carrying a purported contractual agreement on the carton, which contained a condition that the cartridge would be used only once, and the empty cartridge then returned to Lexmark.²²¹

In the second category of cases, there is no contractual restriction. DRM is used in isolation to achieve the same ends, including by impeding the lawful uses of consumers' chattels.²²² *Chamberlain* is an example of this type of case. In that case, there was no express restriction on a customer's ability to use a non-Chamberlain remote control to operate their garage doors, but their rolling code software had the same effect, rendering competing remote controls incompatible with the Chamberlain door opener.

A Market Definition: Separate Markets or One Cluster Market?

The need for interoperability is a feature of many markets. This is especially so in the computer industry and other high technology industries such as telecommunications. Hardware and software companies can use DRM to lock out their competitors' products by preventing interoperation.

Markets for complements ('aftermarkets') also lend themselves to this kind of control. For the purposes of competition law, a critical preliminary issue is to decide whether there is one market, which includes a durable piece of equipment and complementary spare parts and service, or whether there are multiple markets, consisting of a 'primary' market, for the durable piece of equipment (motor vehicle, computer hardware, printer) and a number of complementary or 'secondary' markets (such as spare parts or toner cartridges) in which the manufacturer of the primary product competes with third-party suppliers.

Consider the case of motor vehicle manufacturers. They have an advantage because they are generally vertically integrated, supplying in both the primary

²¹⁹ Philip Ruddock, Attorney-General, 'DVDs, CDs and Computer Games: Good News for Consumers, Bad News for Pirates' (Press Release, 4 September 2006).

²²⁰ See, eg, EULAs, which have become ubiquitous in the market for commercial computer software.

²²¹ *Lexmark*, 387 F 3d 522, 530 (Sutton J) (6th Cir, 2004). See above n 129 and accompanying text.

²²² *Stevens v Sony* (2005) 224 CLR 193, 255 (Kirby J).

and secondary markets. This advantage is amplified by the advent of DRM. Thus, in selling spare parts which contain some amount of material protected by copyright (such as navigation systems, anti-lock brakes, ignition systems and emission controls), DRM can be used to prevent interoperation with 'non-genuine' parts. In this way, third-party suppliers can be locked out of the secondary markets.

Two theories have been advanced to explain the conduct of buyers in aftermarkets.²²³ According to the first theory, buyers of original equipment are sophisticated and have access to sufficient information to make an assessment of 'whole life' costs (equipment plus parts and service) at the time of purchase. This limits the ability of the equipment manufacturer to charge high prices for parts and service. Thus, if there is competition in the primary market for the original equipment, this implies that there will be competition in the aftermarkets and both markets constitute the one relevant market for competition law purposes.

According to the second theory, buyers are unable to assess 'whole life' costs at the time of purchase. The existence of high switching costs means the seller of the original equipment can 'hold up' customers, who are locked in for as long as they use the original equipment. In this case, there are separate relevant markets for the original equipment, spare parts and repair services.

The second theory was adopted in the Kodak photocopier case, *Eastman Kodak Co v Technical Services Inc*,²²⁴ in the US. The Eastman Kodak Co ('Kodak') held 220 patents covering spare parts required to service its machines. Originally it cooperated with independent service organisations ('ISOs') which repaired and serviced its photocopiers and they flourished. Subsequently, Kodak adopted a more restrictive policy in relation to the servicing of its equipment and withdrew its cooperation. It sold replacement parts only to owners of Kodak equipment who serviced the equipment themselves or used Kodak's service. The District Court granted summary judgment in Kodak's favour.²²⁵ The Court of Appeals reversed this finding.²²⁶ The US Supreme Court affirmed the Court of Appeals.²²⁷

The Supreme Court rejected Kodak's central argument that competition in the primary market precluded market power in the aftermarket. The Court accepted that where consumers face significant information and switching costs, they are locked into a particular brand of equipment.²²⁸ The Court concluded:

In the end, of course, Kodak's arguments may prove to be correct. It may be that its parts, service, and equipment are components of one unified market, or that the equipment market doesn't discipline the aftermarkets so that all three are priced competitively overall, or that any anticompetitive effects of Kodak's

²²³ See Cento G Veljanovski, 'Competition Law Issues in the Computer Industry: An Economic Perspective' (2003) 3 *Queensland University of Technology Law and Justice Journal* 3, 20–1.

²²⁴ 504 US 451 (1992).

²²⁵ *Image Technical Services Inc v Eastman Kodak Co*, No C-87-1686-WWS, 1988 US Dist LEXIS 17218 (ND Cal, 1988).

²²⁶ *Image Technical Service Inc v Eastman Kodak Co*, 903 F 2d 612 (9th Cir, 1990).

²²⁷ *Eastman Kodak Co v Image Technical Services Inc*, 504 US 451 (1992).

²²⁸ *Ibid* 476 (Blackmun J).

behavior are outweighed by its competitive effects. But we cannot reach these conclusions as a matter of law on a record this sparse.²²⁹

The Supreme Court stated:

The Court has held many times that power gained through some natural and legal advantage such as a patent, copyright, or business acumen can give rise to liability if 'a seller exploits his dominant position in one market to expand his empire into the next'.²³⁰

On remand, Kodak was found by the District Court to have used its monopoly over Kodak parts to gain a monopoly over the service of Kodak equipment contrary to § 2 of the *Sherman Act*.²³¹ This was confirmed on appeal.²³² The Ninth Circuit devised a 'single monopoly' theory for patents, under which the patentee is entitled to only one monopoly. While the patents may have given Kodak a monopoly in relation to some of the parts, Kodak was creating a second monopoly in the service market by refusing to sell the parts to ISOs.²³³

Switching to a new product may entail transaction costs and learning costs. There may also be contractual disincentives which make it more difficult for customers to switch. Massimo Motta observes:

the existence of switching costs effectively differentiates goods that would otherwise be perceived as perfectly identical. One might be perfectly indifferent, before opening a bank account, between two banks that charge similar rates and give similar services. However, after having opened an account at a particular bank, the existence of switching costs would make it worth changing banks only if the alternative bank will give much better rates or services. Products that are ex ante identical after a purchase become ex post differentiated.²³⁴

The question whether there was a separate, secondary market for brand-specific spare parts arose in Australia in *Regents Pty Ltd v Subaru (Aust) Pty Ltd*.²³⁵

It was alleged that Subaru (Aust) Pty Ltd ('Subaru') had misused its market power contrary to s 46 of the *TPA* by terminating Regents Pty Ltd's ('Regents') distributorship, and thereafter refusing both to supply it with genuine Subaru spare parts and to authorise it to resell such parts and service Subaru cars. The applicant's case depended on a finding that there were separate markets for cars and Subaru parts. The respondents contended that there was only one relevant market: that for the sale of cars and ancillary services.

Nicholson J adopted the first theory set out above and concluded that there was only one relevant market: namely, that for the supply of motor vehicles, parts and

²²⁹ Ibid 486 (Blackmun J).

²³⁰ Ibid 479 (Blackmun J), citing *Times-Picayune Publishing Co v United States*, 345 US 594, 611 (Clark J) (1953).

²³¹ *Image Technical Service Inc v Eastman Kodak Co*, No C 87-1686 AWT, 1996 US Dist LEXIS 2386 (ND Cal, 1996).

²³² *Image Technical Services Inc v Eastman Kodak Co*, 125 F 3d 1195 (9th Cir, 1997).

²³³ Ibid 1216 (Beezer J).

²³⁴ Massimo Motta, *Competition Policy: Theory and Practice* (2004) 79 (emphasis in original).

²³⁵ (1998) 84 FCR 218 ('*Regents v Subaru*').

ancillary services. The aftermarket was merely a sub-market of this broader market.

The existence of a separate Subaru parts aftermarket depended on the 'commercial realities' faced by consumers.²³⁶ Nicholson J found that the respondent's contentions regarding the relevant product market could be made out on the basis of the following evidence:

- There was evidence of cross-elasticity of demand and supply at the wholesale level. If the price of Subaru parts was raised, buyers (retailers of parts) switched their patronage to other brands of cars or parts, or to non-genuine parts. On the supply side, manufacturers of Subaru parts and non-genuine parts could adjust their production plans.²³⁷
- There was also evidence of cross-elasticity of supply and demand at the retail level. Non-genuine parts were not available for the majority of Subaru lines (81 per cent), so that substitution only took place in a few lines. However, these few lines were the high volume lines and there was evidence of strong substitution.²³⁸
- As regards the interrelationship between cars and the parts market, it was established that the gross profit margin on parts was around 50 per cent while the margin on the sale of motor vehicles was only between seven to 14 per cent. There were two reasons for the substantial difference in profit margins: first, the close and vigorous competition in relation to the supply of new motor vehicles; and second, the absence of competition in relation to Subaru parts.²³⁹

His Honour concluded:

the high prices of Subaru spare parts result from substantial regard by the respondent to prices of such parts in relation to other marques of cars. It is not therefore open to the inference that the prices only exist due to lack of competition in the market for Subaru parts. Rather the price results from the pricing of parts being competitive with other marques of cars and parts. That is a competition evidencing the interconnection and complementarity of the cars and parts markets, as the case for the respondent contends.²⁴⁰

Thus, while the parts of other car manufacturers were not physically substitutable for Subaru parts, Subaru, in pricing its parts, nevertheless had regard to the prices of parts for other makes of cars to ensure that consumers did not reject Subaru cars because Subaru parts were too expensive.²⁴¹

In Australia, since the introduction of s 4E of the *TPA*, courts have applied the economic test in defining markets and have rejected attempts to define markets

²³⁶ Ibid 228–9 (Nicholson J).

²³⁷ Ibid 236.

²³⁸ Ibid 236–7.

²³⁹ Ibid 237.

²⁴⁰ Ibid.

²⁴¹ Ibid 236–7.

in terms of a single trademarked product such as Salomon ski boots,²⁴² Toyota brand vehicles,²⁴³ or a single copyright work.²⁴⁴

The courts have not, however, rejected the possibility that a single brand product may constitute a separate economic market. In *Melway Publishing Pty Ltd v Robert Hicks Pty Ltd*,²⁴⁵ the holding of the trial judge — that ‘there is a separate directory market in each major city’²⁴⁶ and that the Melbourne one was dominated by the *Melway Street Directory*,²⁴⁷ a copyrighted product — was upheld on appeal to the High Court.²⁴⁸

Original equipment, parts and service are likely to comprise one relevant market (a ‘cluster market’) for the purposes of competition law in the following circumstances:

- 1 there is effective competition in the market for the original equipment;²⁴⁹
- 2 there is sufficient information available to customers to allow them to predict ‘whole life’ costs at the time of purchase of the original equipment;²⁵⁰
- 3 there are low switching costs;²⁵¹ and
- 4 the original equipment has a short life and high turnover by customers.

However, these factors cannot conclusively establish that a cluster market exists. In *Regents v Subaru*, Nicholson J acknowledged that:

Whether dealings in a particular product can constitute a market will depend on whether the circumstances require the market to be more broadly delineated. This in turn will depend on whether the concept of substitutability leads in reality and in the long run to coverage of a wider field.²⁵²

His Honour also acknowledged that ‘[s]pare parts not readily interchangeable for those of other machines may ... lead to the finding of the existence of such a market.’²⁵³

His Honour cited *Hugin Kassaregister AB v Commission of the European Communities*²⁵⁴ as authority for this proposition.²⁵⁵ In *Hugin*, the Court of Justice of the European Communities held that a Swedish company, Hugin Kassaregister AB, and its British subsidiary, Hugin Cash Registers Pty Ltd (jointly ‘Hugin’), occupied a dominant position in the market for the supply of

²⁴² *Mark Lyons Pty Ltd v Bursill Sportsgear Pty Ltd* (1987) 75 ALR 581.

²⁴³ *J Ah Toy Pty Ltd v Thiess Toyota Pty Ltd* (1980) 3 ATPR ¶40-155.

²⁴⁴ *Broderbund Software Inc v Computermate Products (Australia) Pty Ltd* (1991) 22 IPR 215 (‘Broderbund’).

²⁴⁵ (2001) 205 CLR 1.

²⁴⁶ *Robert Hicks Pty Ltd (t/as Auto Fashions Australia) v Melway Publishing Pty Ltd* (1998) 42 IPR 627, 638 (Merkel J).

²⁴⁷ *Ibid* 639–40 (Merkel J).

²⁴⁸ *Melway Publishing Pty Ltd v Robert Hicks Pty Ltd* (2001) 205 CLR 1, 34 (Kirby J).

²⁴⁹ *Regents v Subaru* (1998) 84 FCR 218, 236 (Nicholson J).

²⁵⁰ *Ibid* 235 (Nicholson J).

²⁵¹ *Ibid*.

²⁵² *Ibid* 223.

²⁵³ *Ibid*.

²⁵⁴ (C-22/78) [1979] ECR 1869 (‘Hugin’).

²⁵⁵ *Regents v Subaru* (1998) 84 FCR 218, 223 (Nicholson J).

parts for their cash registers,²⁵⁶ because these parts were not interchangeable with parts from other brands and could not otherwise be economically reproduced,²⁵⁷ even though Hugin had only 12 per cent of the market for cash registers within the European Communities.²⁵⁸

That a manufacturer can be dominant in the supply of its own spare parts was implicit in the European Court of Justice's judgments in *Volvo AB v Erik Veng (UK) Ltd*²⁵⁹ and *Conorzio Italiano della Componentistica di Ricambio per Autoveicoli v Régie Nationale des Usines Renault*,²⁶⁰ both of which involved the use of IP rights to preclude competition in the market for spare parts for certain brands of vehicles.

Nicholson J distinguished the situation in *Regents v Subaru* from these overseas authorities because of the 'degree of wholesale and retail substitutability and complementarity of the parts and cars.'²⁶¹

In a case such as *Lexmark* where DRM is used to completely eliminate substitute products, the 'commercial reality' for consumers is that a separate market for brand-compatible products will probably exist.

Cento G Veljanovski has identified a number of factors which, if all or most are present, may suggest that a cluster market exists. These factors include:

- effective competition in the market for the durable product;
- a high proportion of current to historical sales of the durable product;
- the initial purchasers' knowledge of, and ability to predict, 'whole life' costs;
- transparent costs for complementary products;
- many repeat purchasers;
- low switching costs;
- competition in the market for complementary products; and
- a high degree of technical change leading to short life of equipment.²⁶²

B DRM Technology as a Separate Market

In many cases, it is likely that a separate market will exist for DRM technology itself. Such a market can exist even without actual trade in DRM technology within that market. In *Queensland Wire Industries Pty Ltd v Broken Hill Proprietary Co Ltd*,²⁶³ three judges of the High Court (Deane, Dawson and Toohey JJ) held that actual trade is not required to establish that a market exists. Deane J (with whom Dawson J agreed generally) held that 'a market may exist ... if there exists a demand for (and the potential for competition between traders

²⁵⁶ (C-22/78) [1979] ECR 1869, 1874.

²⁵⁷ *Ibid.*

²⁵⁸ *Ibid.* 1872.

²⁵⁹ (C-238/87) [1988] ECR 6211.

²⁶⁰ (C-53/87) [1988] ECR 6039.

²⁶¹ *Regents v Subaru* (1998) 84 FCR 218, 237.

²⁶² Veljanovski, above n 223, 22.

²⁶³ (1989) 167 CLR 177 ('*Queensland Wire*').

in) such goods at that level, notwithstanding that there is no supplier of, nor trade in, those goods at a given time'.²⁶⁴

Dawson J elaborated on this in his concurring judgment:

The existence or non-existence of sales of a product cannot conclude whether a market exists or not. It must be sufficient to constitute a market that there is a product for exchange, regardless of whether exchange or negotiation for exchange has actually taken place.²⁶⁵

Toohey J relied in his judgment on a broader market for steel and steel products, but noted that if it were necessary to consider a market for the particular steel product in issue, 'the absence of existing buyers does not mean that there is no market for [the product]'.²⁶⁶

This approach has been adopted by the Full Federal Court in subsequent cases,²⁶⁷ and confirmed by the High Court in *NT Power Generation Pty Ltd v Power and Water Authority*.²⁶⁸ Where a DRM technology or class of technologies exist, and there is a demand or potential demand for access to it, this will be sufficient to establish a market for competition law purposes, even where the DRM owner has not and will not sell or allow others access to it.

In the *VirginMega Case*,²⁶⁹ the French competition authority held that there were three relevant markets: a market for DRM for music; a market for portable digital music playing devices; and a market for the online sale of downloadable music.²⁷⁰ In the market for DRM for music, Apple's FairPlay DRM system competes with other systems, including the Microsoft Windows Media Audio ('WMA') DRM system. Microsoft integrates its WMA DRM system with the Microsoft Windows operating system, which is used on the vast majority of PCs in the world, giving the Microsoft DRM system a massive installed base of users. The European Commission had previously referred to Microsoft as having a 'leading position in the DRM solutions market'.²⁷¹ For these reasons, the French competition authority considered it unlikely that Apple held sufficient market share to give it a dominant position in the market for DRM.²⁷²

If, owing to incompatibilities between DRM systems, consumer behaviour, or 'commercial realities', the market had been defined more narrowly (as a market for FairPlay-compatible DRM systems), Apple would almost certainly have substantial market power within that market.

²⁶⁴ Ibid 196.

²⁶⁵ Ibid 200.

²⁶⁶ Ibid 211.

²⁶⁷ *ASX Operations Pty Ltd v Pont Data Australia Pty Ltd [No 1]* (1990) 27 FCR 460, 478 (Lockhart, Gummow and von Doussa JJ); *Rural Press Ltd v Australian Competition and Consumer Commission* (2002) 118 FCR 236.

²⁶⁸ (2004) 219 CLR 90, 131 (McHugh ACJ, Gummow, Callinan and Heydon JJ) ('*NT Power*').

²⁶⁹ Conseil de la Concurrence, above n 13.

²⁷⁰ Ibid 3–6.

²⁷¹ European Commission, 'Commission Opens In-Depth Investigation into Microsoft/Time Warner/ContentGuard JV' (Press Release, 25 August 2004) Doc No IP/04/1044.

²⁷² Conseil de la Concurrence, above n 13, 7.

C Supply Subject to Restrictive Conditions — Section 47(2)

Section 47(2) of the *TPA* includes within the practice of exclusive dealing conditions which restrict a buyer from acquiring goods or services from a competitor of the supplier. Section 47(2) provides:

A corporation engages in the practice of exclusive dealing if the corporation —

- (a) supplies ... goods or services;
- (b) supplies, or offers to supply, goods or services at a particular price; or
- (c) gives or allows, or offers to give or allow, a discount, allowance, rebate or credit in relation to the supply of goods or services by the corporation;

on the condition that the person to whom the corporation supplies ... goods or services ...

- (d) will not, or will not except to a limited extent, acquire goods or services ... directly or indirectly from a competitor of the corporation ...; or
- (f) in the case where the corporation supplies ... goods or services, will not re-supply the goods or services to any person, or will not, or will not except to a limited extent, re-supply the goods or services:
 - (i) to particular persons or classes of persons or to persons other than particular persons or classes of persons ...

The conduct in *Lexmark* would fall within s 47(2)(b) or (c) and s 47(2)(d) or (f), in that Lexmark supplied toner cartridges at a particular price,²⁷³ or gave a discount or allowance (the prebate),²⁷⁴ but:

- 1 on the express contractual condition that the customer would not acquire the services of a cartridge remanufacturer to refill the cartridge;²⁷⁵
- 2 on the express contractual condition that the customer would not resupply the empty toner cartridge to anyone other than Lexmark;²⁷⁶ and
- 3 on the implied condition that the customer would not acquire remanufactured cartridges from remanufacturers.²⁷⁷

In order to fall within the definition of ‘exclusive dealing’ in s 47(2)(d), it is sufficient that the condition is implied and not legally enforceable. The High Court observed in *Visy Paper Pty Ltd v Australian Competition and Consumer Commission*²⁷⁸ that the word ‘condition’ in s 47 has a meaning ‘uncircumscribed by contract law notions’.²⁷⁹

This is clear from s 47(13)(a), which provides:

A reference to a condition shall be read as a reference to any condition, whether direct or indirect and whether having legal or equitable force or not, and

²⁷³ *TPA* s 47(2)(b).

²⁷⁴ *TPA* s 47(2)(c).

²⁷⁵ *TPA* s 47(2)(d).

²⁷⁶ *TPA* s 47(2)(f)(i).

²⁷⁷ *TPA* s 47(2)(d).

²⁷⁸ (2003) 216 CLR 1.

²⁷⁹ *Ibid* 6 (Gleeson CJ, McHugh, Gummow and Hayne JJ).

includes a reference to a condition the existence or nature of which is ascertainable only by inference from the conduct of persons or from other relevant circumstances.

While a 'condition' for the purposes of s 47 need not necessarily have legal or equitable force, it must involve more than a mere hope or expectation.²⁸⁰ The implied condition described above (Point 3) might fall into the category of a 'mere hope or expectation' but the express contractual provisions on the carton containing the toner cartridge would almost certainly be a 'condition' within the meaning of s 47.

D *Does the Condition Have the Purpose, or Likely Effect, of Substantially Lessening Competition?*

To be prohibited by s 47, the condition must have the purpose or likely effect of substantially lessening competition.²⁸¹ In assessing this, the first step is to define the relevant market in which the competition occurs. The substantial lessening of competition test focuses on the likely future conduct of firms in the market on a 'with' and 'without' basis. In the words of the Trade Practices Tribunal (now the Australian Competition Tribunal) in *Re Queensland Co-Operative Milling Association Ltd*,²⁸² it is necessary to ask: will the conduct at issue allow the parties to 'give less and charge more'?²⁸³ The essential question is not whether 'the conduct harms competitors', but 'how might the conduct harm consumers'?

In assessing the effect or likely effect of a restrictive condition in a licence, it is necessary to ask: what is likely to happen in the future *with* the condition ('the factual'), and what is likely to happen in the future *without* the condition ('the counterfactual').²⁸⁴ The proper question to ask is therefore: 'looking into the future, will the condition reduce competition that would otherwise have existed in the market but for the condition?'²⁸⁵

In *Universal Music Australia Pty Ltd v Australian Competition and Consumer Commission*,²⁸⁶ the Full Federal Court found that the conduct of Universal Music Australia Pty Ltd ('Universal') and Warner Music Australia Pty Ltd ('Warner') in seeking to dissuade retailers from selling imported stock fell within the definition of 'exclusive dealing'. Communications by Universal and Warner with retailers as to the terms of trade were characterised as supply on the condition that the retailers would not acquire non-infringing copies from a competitor, and as a refusal to supply if retailers acquired non-infringing copies from a competitor.

²⁸⁰ *SWB Family Credit Union Ltd v Parramatta Tourist Services Pty Ltd* (1980) 32 ALR 365.

²⁸¹ *TPA* s 47(10).

²⁸² (1976) 25 FLR 169.

²⁸³ *Ibid* 190 (Woodward P, Members Shipton and Brunt).

²⁸⁴ *Outboard Marine Australia Pty Ltd v Hecar Investments [No 6] Pty Ltd* (1982) 44 ALR 667; *Stirling Harbour Services Pty Ltd (ACN 008 767 600) v Bunbury Port Authority* (2000) 22 ATPR ¶41-783, 41 267 (Burchett and Hely JJ), 41 279 (Carr J) ('*Stirling Harbour Services*').

²⁸⁵ *Stirling Harbour Services* (2000) 22 ATPR ¶41-783, 41 267 (Burchett and Hely JJ), 41 279 (Carr J).

²⁸⁶ (2003) 131 FCR 529 ('*Universal Music Case*').

The Full Federal Court held that the conduct did not have the effect or likely effect of substantially lessening competition. The evidence was that many retailers purchased non-infringing copies either by direct importation or by purchasing stock imported by others. Accordingly, the conduct did not have the effect of substantially lessening competition.²⁸⁷ This may have been because it was ‘nipped in the bud’ by the Australian Competition and Consumer Commission’s (‘ACCC’) intervention, or the fact that many retailers were not intimidated by the threats.

However, the Full Federal Court held that it did have the proscribed *purpose* of substantially lessening competition. By dissuading retailers from purchasing imported stock they were able to restrict *intra-brand* competition in relation to their own CD titles even though there was evidence of *inter-brand* competition with CD titles of other suppliers.

Each of the appellants was responsible for a sixth of the total CDs sold wholesale in Australia. The Full Federal Court held:

In the case of a true commodity, such as wheat, elimination of competition from a supplier holding one-sixth of the market might have little effect on competition in that market; the customers might simply transfer their business to the remaining five suppliers in the market, who might compete fiercely for that business. However, CD titles are not an homogeneous commodity. Each is unique. Each appeals to a different audience, although audiences overlap. If *intra-brand* competition is eliminated, there is no direct price competition or any direct competition in relation to the aggregation of unique titles. Of course, each title is in competition with the titles of other suppliers in the same market and that, over time, would impose some competitive pressure. However, if a major supplier could hold the line against *intra-brand* competition from imports, it could determine in its own time whether to respond to competition from other suppliers and, if so, how to do this. We are satisfied this comfortable situation would apply to a significant proportion of the available titles, and amount to a substantial lessening of competition ...²⁸⁸

In *Lexmark*, the effect of the contractual conditions was to deny cartridge remanufacturers an essential input ingredient (empty toner cartridges), and the effect of the DRM was to prevent customers from using remanufactured cartridges in their printers. But what was the *purpose* of these measures?

Lexmark could have undoubtedly claimed reasonable commercial motives for their conduct. The prebate programme could be justified as a response to customer dissatisfaction with the previous rebate programme, and the DRM justified to protect Lexmark from dishonest diversion of cartridges on which the prebate had been given.

²⁸⁷ Ibid 586 (Wilcox, French and Gyles JJ).

²⁸⁸ Ibid 591 (Wilcox, French and Gyles JJ).

For a condition to offend against s 47 because its purpose was to substantially lessen competition, that need not be its *only* purpose. Section 4F(1)(b) of the *TPA* provides that for the purposes of the *TPA*:

a person shall be deemed to have engaged or to engage in conduct for a particular purpose or a particular reason if:

- (i) the person engaged or engages in the conduct for purposes that included or include that purpose or for reasons that included or include that reason, as the case may be; and
- (ii) that purpose or reason was or is a substantial purpose or reason.

It would then be sufficient that *one of* Lexmark's purposes was to lessen competition substantially, even if they also had legitimate purposes in mind, so long as lessening competition was a *substantial* or *operative* purpose.²⁸⁹

*E Supply Subject Only to Technical Restrictions, or Refusal To Supply —
Section 46(1)*

In the second category of cases, there are no restrictive conditions but the same effect is achieved by technical means: namely, DRM technology that locks out competitors. In order to get access or ensure interoperability, a competing supplier will need a licence of the DRM technology. Unilateral refusal to license by the supplier can only be challenged as a violation of s 46 of the *TPA*. In order to establish a contravention of s 46 it is necessary to establish three elements:

- 1 the respondent had a substantial degree of market power at the time that it engaged in the conduct;
- 2 the respondent took advantage of its market power when it engaged in the conduct; and
- 3 the respondent engaged in the conduct for one of the subjective anti-competitive purposes set out in s 46(1).

F Does Ownership of IP Rights Confer Market Power?

The High Court noted in *NT Power* that IP rights are often a very clear source of market power.²⁹⁰ The High Court did not elaborate upon this statement. In a situation involving aftermarkets (such as in *Regents v Subaru* or *Lexmark*), the most important factor in determining the existence of substantial market power will be how the relevant market is defined.

If the relevant market is a non-brand specific cluster market (as found in *Regents v Subaru*), then a traditional analysis of market power is required. If, on the other hand, a separate market for brand-specific parts or consumables is

²⁸⁹ In *Melway Publishing Pty Ltd v Robert Hicks Pty Ltd*, Melway Publishing Pty Ltd was found to have a number of legitimate commercial reasons for desiring to maintain its wholesale distribution system and restrict competition between its wholesale distributors as part of that system. Nevertheless, the primary judge and the Full Court found that it had a proscribed purpose and this finding was not disturbed by the High Court: *Melway Publishing Pty Ltd v Robert Hicks Pty Ltd* (2001) 205 CLR 1, 20 (Gleeson CJ, Gummow, Hayne and Callinan JJ).

²⁹⁰ (2004) 219 CLR 90, 136 (McHugh ACJ, Gummow, Callinan and Heydon JJ).

found (for example, toner cartridges for Lexmark printers or spare parts for Subaru cars), then in the absence of actual or potential competition in those markets, a finding of substantial market power on the part of the brand-owner will probably follow. This is especially so when DRM has been used to exclude competitors and ensure that the brand-owner is the only supplier within that market.

In *Queensland Wire*, Mason CJ and Wilson J defined ‘market power’ as ‘the ability of a firm to raise prices above the supply cost without rivals taking away customers *in due time*, supply cost being the minimum cost an efficient firm would incur in producing the product’.²⁹¹ The words ‘in due time’ are significant. The existence of market power is to be tested not by reference to any short-term influence on price, but rather by reference to the longer run. Two cases have considered the issue of the time period over which to assess whether a supplier has the ability to raise prices above supply cost without losing business to another supplier.

In the *Universal Music Case*,²⁹² the issue was whether the major record companies, Universal and Warner, had contravened s 46 in refusing to supply stock to retailers who sold imported CDs. The trial judge, Hill J, concluded that a market share of between 15–18 per cent, combined with a number of other factors including product differentiation, could amount to a substantial degree of market power for the purposes of s 46(1).²⁹³ This finding was overturned on appeal by the Full Federal Court.²⁹⁴

Professor Jerry Hausman, the economist for Universal and Warner, defined market power to mean ‘the ability of a firm to charge a price significantly above the competitive level for a non-transitory period of time’.²⁹⁵ He argued that Universal and Warner were not able to raise their prices for CDs above the competitive level because they were constrained by other competing record companies in their price setting. If either sought to raise prices, consumers would switch and purchase the CDs of their competitors. They were also constrained by the countervailing power of large buyers (such as Sanity and HMV) who were able to extract large discounts and other favourable terms of trade by threatening not to buy Universal or Warner CDs.

It was held that there were no significant barriers to entry to the record industry generally. This was demonstrated by evidence of new entry by independent recording companies from time to time. Production costs for CDs were relatively low. Publicity and promotion costs were the most significant item of expenditure. Hill J concluded that ‘Universal and Warner had each a substantial degree of market power in the market by virtue of each having hits or back catalogue’²⁹⁶ which retailers needed to be able to stock:

²⁹¹ (1989) 167 CLR 177, 188 (emphasis added).

²⁹² (2003) 131 FCR 529.

²⁹³ *Australian Competition and Consumer Commission v Universal Music Australia Pty Ltd* (2001) 115 FCR 442, 540–2.

²⁹⁴ *Universal Music Case* (2003) 131 FCR 529, 565, 568 (Wilcox, French and Gyles JJ).

²⁹⁵ *Australian Competition and Consumer Commission v Universal Music Australia Pty Ltd* (2001) 115 FCR 442, 522 (Hill J).

²⁹⁶ *Ibid* 543.

I find the issue of market power and its related issue of barriers to entry extremely difficult to decide. It is really at the heart of the controversy between the parties. The case of a firm acting in an oligopolistic market with only 15 per cent market share and unable to fix prices in the overall market above the competitive level but which has, as a result of a *temporary monopoly power* over a limited number of products in that market, substantial power to exclude competitors is not one which has been the subject of any authority in Australia or, so far as my researches indicate, in any other country.²⁹⁷

The Full Federal Court, comprising Wilcox, French and Gyles JJ, disagreed, holding that the issue of substantial market power is not to be tested by reference to whether a firm can engage in anti-competitive conduct or incidents of abuse of market power, since all participants in a market have some degree of market power which may, on occasion, enable them to engage in anti-competitive conduct.²⁹⁸ The central question is whether the firm has *persistent* market power rather than temporary market power.

The Court accepted the findings of Hill J that it was ‘commercially imperative’ for retailers to stock the Australian catalogue of each of the major distributors and that a refusal to supply would cause a retailer considerable inconvenience and loss of sales and profits.²⁹⁹ However, this was not enough to demonstrate substantial market power. The Full Court held that ‘[m]arket power is judged by reference to persistent rather than temporary conditions.’³⁰⁰

A similar view about the need to assess market power over the longer term was taken by French J in *Australian Gas Light Co v Australian Competition and Consumer Commission [No 3]*.³⁰¹

Copyright law protects the expression of an idea. It prevents the literal copying of the creative work. It does not prevent others from creating or distributing similar works. Copyright does not confer a great deal of market power. There are often substitutes for any given book or computer program.

In *Broderbund*,³⁰² it was argued that a computer software program was a unique product market. The software program, *Where in the World is Carmen Sandiego?* (*‘Carmen Sandiego’*), was a piece of educational software. Beaumont J found that Broderbund Software Inc’s market share was in the range of 10–17 per cent. His Honour accepted evidence that there were many alternative educational games which were used to develop some of the skills claimed to be developed by the *Carmen Sandiego* software.³⁰³

To establish substantial market power in a cluster market, it would be necessary to demonstrate that the TPM in question had become the industry standard, or had genuinely unique features such that it was almost an ‘essential facility’.

In summary, determining the existence of substantial market power in a broad cluster market requires an analysis of the structure of the market and, in

²⁹⁷ Ibid 539–40 (emphasis added).

²⁹⁸ *Universal Music Case* (2003) 131 FCR 529, 564.

²⁹⁹ Ibid 565.

³⁰⁰ Ibid 567–8.

³⁰¹ (2003) 137 FCR 317 (*‘AGL Case’*).

³⁰² (1991) 22 IPR 215.

³⁰³ Ibid 238–41.

particular, barriers to entry over the longer term. Even in a competitive market structure, a firm may enjoy temporary market power because of a lack of information about price variations between suppliers. In the longer term, however, such price variations will tend towards uniformity. A position of substantial market power requires the existence of long-run barriers to competition and, as French J found in the *AGL Case*,³⁰⁴ the time frame for such an assessment is years rather than months.

If the relevant market is instead a market for brand-specific parts or consumables, where DRM is used to preclude competition, the brand owner will almost certainly have substantial market power.

G The 'Taking Advantage' Element

There must be a causal link between the conduct at issue and the respondent's market power, in the sense that the conduct necessarily involves a use of the market power. This is tested by means of the counterfactual approach, according to which one asks whether the respondent could or would be likely to engage in the conduct under competitive conditions. If a firm acting under competitive conditions could or would engage in the same conduct, then there is no necessary link between the conduct and the respondent's market power.

Whether the exercise of an exclusive right comprised within copyright can constitute taking advantage of market power in Australia was considered in *Broderbund*.³⁰⁵ In considering this issue, Beaumont J made extensive reference to the decision of the Court of First Instance of the European Communities in *Independent Television Publications Ltd v Commission of the European Communities*.³⁰⁶ In that decision, the Court of First Instance characterised the conduct of the applicant as 'using its copyright ... in order to secure a monopoly in the derivative market'³⁰⁷ and said that:

Conduct of that type — characterized by preventing the production and marketing of a new product, for which there is potential consumer demand ... and thereby excluding all competition from that market solely in order to secure the applicant's monopoly — clearly goes beyond what is necessary to fulfil the essential function of the copyright as permitted in Community law.³⁰⁸

Beaumont J distinguished the situation in *Broderbund* (involving the parallel importation of computer software) from the *Magill Case*, and held in obiter dicta that use of the exclusive right to control importation did not constitute taking advantage of market power.³⁰⁹

This decision may seem problematic for the use of s 46 to address the misuse of DRM technology, but those situations can be distinguished from *Broderbund*

³⁰⁴ (2003) 137 FCR 317.

³⁰⁵ (1991) 22 IPR 215.

³⁰⁶ (T-76/89) [1991] ECR II-575 ('*Magill Case*'). The case involved a refusal by television broadcasters to license information about their programming necessary to produce a comprehensive weekly television guide.

³⁰⁷ *Ibid* 602.

³⁰⁸ *Ibid*. This decision was later upheld on appeal: *Radio Telefis Eireann (RTE) v Commission of the European Communities* (C-242/91P) [1995] ECR I-743.

³⁰⁹ *Broderbund* (1991) 22 IPR 215, 243.

on several grounds. First, there is no statutory right for copyright owners to use DRM to protect their copyright — the *Copyright Act 1968* (Cth) merely provides certain protections for any such DRM employed, if it is a TPM within the meaning of the Act.

Second, and most importantly, the controlling of *access to* or *use of* copyright material is *not* an exclusive right comprised within copyright. The use of DRM to control access to or use of copyright material in order to secure a monopoly over complementary products, such as that which occurred in *Lexmark* and *Chamberlain*, is a misuse of copyright law more analogous to the *Magill Case* than to *Broderbund*.

1 *Counterfactual Test — Consumer Lock-In*

Cases such as *Lexmark* and *Chamberlain* involve companies (the ‘original manufacturer’) who produce durable consumer products (laser printers and garage door openers) and design those products to lock in consumers by ensuring that competitors will be unable to produce complementary products (toner cartridges and remote controls) that will work with the durable product. Could or would a company operating under competitive conditions engage in such conduct?

There are obvious financial benefits to locking in customers. Customers requiring complementary products will have no alternative other than to purchase from the original manufacturer, at whatever price and on whatever terms the original manufacturer sees fit. Lock-in provides a commercial temptation to exploit those who have already purchased the durable product, a practice sometimes called ‘installed user opportunism’.³¹⁰ Where the lifespan of the durable product is long, this will result in a level of long-term guaranteed business.

Locking in customers may also have negative effects. Customers affected by a lock-in, usually by having to purchase complementary products at ‘monopoly rent’ pricing, may become dissatisfied with the original manufacturer’s products. They may choose to change brands when making future purchases of durable products. Where potential buyers of the durable products have good information about the existence of the lock-in and their financial consequences, they may consider the ‘life cycle’ pricing and choose an alternative product. Where the lifespan of the durable products is long, the monopoly rents charged for complementary products over the life of the durable product may exceed the switching costs that would be incurred by replacing the durable product, causing the original manufacturer to lose market share.

The increasing number of vendors in high technology markets who are engaging in consumer lock-ins might suggest that, in the final analysis, the benefits outweigh the costs. If this is the case, and the company could or would engage in the impugned conduct under competitive conditions, the company will not have taken advantage of its market power and there will have been no breach of *TPA* s 46(1).

³¹⁰ Veljanovski, above n 223, 20.

2 Counterfactual Test — Refusal To License

DRM technologies themselves are the subject of IP rights — such as copyright, patents and trade secrets — and the owner of a DRM technology may refuse to license those rights. However, the High Court has held that the refusal to license IP rights can constitute a misuse of market power and that this was clearly contemplated by Parliament in s 51(3) of the *TPA*.³¹¹ Could or would the owner of a DRM technology, in a competitive market, refuse to license?

It seems unlikely. The market for DRM technologies, like many high technology markets, is subject to strong network effects and ‘tipping’. A network effect exists when, other things being equal, a consumer would prefer to join a larger, rather than a smaller network.³¹² Tipping occurs when a supplier gains dominance not because of the superiority of their product, but because it attains a critical mass at which consumers — who would have otherwise purchased from a competitor — shift towards it in large numbers.³¹³

As applied to competitive markets for DRM technologies, other things being equal, consumers are likely to use a DRM technology which has the widest range of content available using that DRM, and content providers are likely to use the DRM which has the most number of consumers using it.

For this reason, it is important for DRM vendors to license their DRM technology as widely as possible.³¹⁴ Failure to do so would subject vendors to the risk of losing substantial market share to competitors with more liberal licensing terms. Network effects can also act as an incentive to create interoperable DRM systems between different DRM vendors.³¹⁵ Where different DRM systems are interconnected and interoperable, consumers and vendors will reap the benefits of having a larger network.³¹⁶

The number of viable DRM systems will depend on the significance and nature of the network benefits function, other factors being equal. If the network effects are exhausted at user numbers which are far less than the potential market, then, in the presence of network effects, more than one DRM system will be sustainable.³¹⁷

There is no necessary reason to assume that network effects will necessarily lead to tipping and an eventual natural monopoly.³¹⁸ However, the history of high technology markets, especially those driven by the entertainment industry, shows that they tend towards tipping and the emergence of a monopoly product market.³¹⁹

³¹¹ See *NT Power* (2004) 219 CLR 90, 121–2 (McHugh ACJ, Gummow, Callinan and Heydon JJ).

³¹² See generally Henry Ergas, ‘The (Uneasy and Somewhat Messy) Interaction of the IP Laws and the Competition Laws’ (Paper presented at the Trade Practices and Consumer Law Conference, Sydney, 27 May 2000) 7; Carl Shapiro and Hal R Varian, *Information Rules: A Strategic Guide to the Network Economy* (1999).

³¹³ Shapiro and Varian, above n 312.

³¹⁴ Veljanovski, above n 223, 5.

³¹⁵ *Ibid* 7.

³¹⁶ *Ibid*.

³¹⁷ *Ibid* 6.

³¹⁸ *Ibid* 7.

³¹⁹ See, eg, the commercial demise of the Betamax video tape standard (largely attributed to the more liberal licensing terms of the competing standard), leaving the competing VCR standard with a near monopoly.

Once the installed base of a particular DRM reaches the critical mass and tipping occurs, other DRM vendors are likely to be relegated to, at best, marginal positions in the market.

Notwithstanding the above, there may be a significant commercial justification for refusing to license a DRM technology. Copyright holders whose works are protected by the DRM may impose conditions on the DRM vendor, restricting or preventing their ability to license the DRM. This is more likely where the DRM vendor is vertically integrated, producing not only the DRM, but selling the DRM-protected content under licence, and also producing the DRM-compatible software and hardware used to access the content. One example of this is Apple, which produces the FairPlay DRM technology, sells the FairPlay-protected content under licence via the iTunes Music Store, and produces iTunes and iPods, the only FairPlay-compatible software and hardware capable of accessing that content.

A particularly aggressive competitor could adopt a 'winner takes all' strategy, where they refuse to license or interconnect, and compete aggressively by offering an exclusive and incompatible DRM system to consumers. Such a strategy could be viewed as either pro-competitive (by causing vigorous competition in the market), or alternatively, as an abuse of market power designed to foreclose the market to smaller competitors.³²⁰

3 *Summary*

Whether a company could or would engage in the impugned conduct under competitive market conditions is a question of fact and will be heavily dependant on the circumstances of the individual case. While it is not possible to set down firm guidelines, it is perhaps more likely that the refusal to license DRM technology would constitute taking advantage of market power, than the mere creation of consumer lock-ins.

H *Proscribed Purpose*

Finally, the taking advantage of market power must be for one of the proscribed purposes in *TPA* s 46(1), namely:

- (a) eliminating or substantially damaging a competitor of the corporation ... in that or any other market;
- (b) preventing the entry of a person into that or any other market; or
- (c) deterring or preventing a person from engaging in competitive conduct in that or any other market.

A proscribed purpose need not be proven; it may be inferred by the court from the conduct of the corporation or from other relevant circumstances.³²¹ A proscribed purpose need not be the *sole* purpose of the corporation; as previously discussed in the context of exclusive dealing, it is sufficient that a proscribed

³²⁰ Veljanovski, above n 223, 7.

³²¹ *TPA* s 46(7).

purpose be *one of many* purposes, so long as it is a substantial or operative purpose.³²²

I Conclusion

The substantive prohibitions in Part IV of the *TPA* may apply to anti-competitive conduct in connection with DRM technologies. The definition of the scope of the relevant markets will be critical and is likely to determine the success or failure of any actions under Part IV. Expert evidence as to the nature of the markets concerned, including consumer behaviour and the degree of substitutability within the markets, will be the key to a successful case.

1 Section 51(3)

Section 51(3) operates as an exception to some provisions of Part IV of the *TPA*, for certain conditions in licences or assignments of certain IP rights, including copyright and patents. Section 51(3) provides:

A contravention of a provision of this Part 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, of a registered design, of a copyright or of EL rights within the meaning of the *Circuit Layouts Act 1989*, or by a person who has applied for a patent or for the registration of a design; or
 - (ii) an assignment of a patent, of a registered design, of a copyright or of such EL rights, or of the right to apply for a patent or for the registration of a design;

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;
- (iv) goods in respect of which the design is, or is proposed to be, registered and to which it is applied;
- (v) the work or other subject matter in which the copyright subsists; or
- (vi) the eligible layout in which the EL rights subsist ...³²³

The only case to consider this exception is *Transfield Pty Ltd v Arlo International Ltd*.³²⁴ In that case, Transfield Pty Ltd ('Transfield') entered into an exclusive sub-licence to make, use, exercise and vend a patented process for the construction of poles for electrical transmission. The licence contained a 'best endeavours' clause, under which Transfield agreed to 'energetically promote and develop the greatest possible market for the [patented] ARLO PTL pole.'³²⁵

³²² *TPA* s 4F(1)(b). See further above n 289 and accompanying text.

³²³ *TPA* s 51(3) (emphasis added).

³²⁴ (1980) 144 CLR 83 ('*Transfield*').

³²⁵ *Ibid* 87 (Barwick CJ).

The best endeavours clause was ‘a condition of ... a licence granted by the proprietor ... of a patent’,³²⁶ but did it *relate to* the invention to which the patent related, or to articles made by use of that invention? While the majority of the High Court in *Transfield* did not find it necessary to consider s 51(3), Mason and Wilson JJ held that the best endeavours clause did ‘relate to’ articles made by use of the patented invention, and that the clause fell within the s 51(3) exception.

In his judgment, Mason J stated:

In bridging the different policies of the *Patents Act* and the *Trade Practices Act*, s 51(3) recognizes that a patentee is justly entitled to impose conditions on the granting of a licence or assignment of a patent in order to protect the patentee’s legal monopoly. ... Section 51(3) determines the scope of restrictions the patentee may properly impose on the use of the patent. Conditions which seek to gain advantages collateral to the patent are not covered by s 51(3).³²⁷

The proper scope of ‘relates to’ within s 51(3) is still a matter of some controversy. Section 51(3) was reviewed by the National Competition Council (‘NCC’) in 1999.³²⁸ The *NCC Review* identified a range of alternative views on the meaning of the term:

- a narrow reading, relating to IP or the goods produced using it if it relates directly to the goods produced;
- an intermediate reading, relating to IP or goods produced using it if the condition seeks to protect and exploit the patentee’s exclusive rights or to secure an advantage that is not collateral to the patentee’s exclusive rights; and
- a broad reading, relating to IP or goods produced using it unless it seeks to apply to an almost entirely unrelated transaction or arrangement.³²⁹

The intermediate reading would permit restrictions such as territorial restrictions and best endeavours clauses to fall within s 51(3), and accords generally with the reasoning of Mason J in *Transfield*. The broad reading would give protection to conditions such as exclusive grant-backs and agreements not to challenge the validity of a licensed patent.³³⁰

Despite the apparent breadth s 51(3), it does not give protection to many types of conduct which may be relevant in the context of DRM. Section 46 of the *TPA* (misuse of market power) is unaffected by s 51(3), as is s 48 (resale price maintenance).

³²⁶ *TPA* s 51(3)(a)(i).

³²⁷ *Transfield* (1980) 144 CLR 83, 102–3.

³²⁸ NCC, *Review of Sections 51(2) and 51(3) of the Trade Practices Act 1974: Final Report* (1999) 186 (‘*NCC Review*’) <<http://www.ncc.gov.au/articles/files/LESe-001.pdf>>.

³²⁹ *Ibid* 184.

³³⁰ *Ibid*.

2 *Resale Price Maintenance*

Although s 48 may not apply to some more traditional methods of licensing IP such as patents,³³¹ it may have relevance in the licensing and distribution of copyright content.³³² If a copyright holder licenses a distributor to distribute copyright material — that is, to license or sub-license the use of that material by end users — but at a price not less than a specified minimum, s 48 may apply.

The specific acts of resale price maintenance proscribed in s 96 of the *TPA* in relation to the resale of goods also apply in relation to the resupply of services.³³³ Resupply of services includes:

- (i) a supply of the original services to another person in an altered form or condition; and
- (ii) a supply to another person of other services that are substantially similar to the original services, and could not have been supplied if the original services had not been acquired by the person [the distributor] who acquired them from the original supplier [the licensor].³³⁴

In such a situation, the distributor is arguably resupplying the services acquired from the licensor, and the licensor would have engaged in an act of resale price maintenance proscribed by s 48.

3 *Refusal To License*

Section 51(3) of the *TPA* protects conditions in licences. Where the impugned conduct is a *refusal* to license, there is no licence and s 51(3) will not be available.³³⁵ All the provisions of Part IV of the *TPA* could then potentially apply. If licensing was refused because the prospective licensee would not agree to anti-competitive restrictions³³⁶ that the licensor sought to impose, the refusal may contravene *TPA* s 47(3).

4 *Types of IP Not Covered*

Section 51(3) of the *TPA* applies to conditions in licences or assignments of certain types of IP which are protected by statute: namely patents, registered designs, copyrights, circuit layout rights and trade marks. Conditions in licences and assignments of any other types of IP — such as know-how, trade secrets and confidential information — will not be protected by s 51(3).

This difference may be significant in the context of licensing of DRM systems, as nearly all such systems would contain elements of know-how, trade secrets and confidential information. Such licences would be open to scrutiny under *TPA* Part IV, to the extent that they deal with IP not protected by s 51(3).

³³¹ For example, if a patentee licenses the use of a patent to produce goods on the condition that the licensor not sell the goods at less than a minimum price, this would fall outside the definition of 'resale price maintenance': *TPA* s 96.

³³² Although note the uncertainty as to the applicability of *TPA* s 51(3) to copyright material discussed in below Part III(1)(5).

³³³ *TPA* s 96A.

³³⁴ *TPA* s 4C(f).

³³⁵ NCC, above n 328, 182.

³³⁶ For example, restrictions on the licensee's ability to deal with competitors of the licensor.

It has also been suggested that s 51(3) would protect only IP created pursuant to Australian statute, and that conditions in licences and assignments of overseas patents would not fall within s 51(3).³³⁷

5 Application to Copyright

Section 51(3) of the *TPA* has yet to be judicially considered as it applies to licences and assignments of copyright. Section 51(3)(a)(v) requires that the conditions must 'relate to ... the work or other subject matter in which the copyright subsists.' Copyright does not subsist in reproductions or copies, but only in the works or subject matter in their first material form. Sam Ricketson suggests that to be within s 51(3), the condition must relate to the work or other subject matter in its first material form, rendering s 51(3) 'virtually meaningless' as it applies to copyright.³³⁸ Such a literal construction of s 51(3) has been criticised,³³⁹ but uncertainty as to the application of s 51(3) to copyright is likely to persist until the section is judicially considered or amended.

6 Future Reform of Section 51(3)

The NCC reviewed ss 51(2) and 51(3) of the *TPA* and delivered its report in March 1999. The *NCC Review* observed that the interpretation of s 51(3) remained to some extent uncertain due to residual ambiguity as to what types of contractual provisions might 'relate to' the IP or goods produced using it.³⁴⁰ The *NCC Review* recommended that s 51(3) be retained but amended to remove protection for 'price and quantity restrictions and horizontal agreements.'³⁴¹

The Intellectual Property and Competition Review Committee ('IPCRC') considered this recommendation in their *Review of Intellectual Property Legislation under the Competition Principles Agreement*.³⁴² The *IPCRC Review* stated that:

there are flaws in the drafting of s 51(3) that under any scenario would require amendment. Leaving aside drafting considerations, the Committee believes that the uncertainty surrounding the scope of the section, and the possibility that it may exempt virtually all agreements which touch on IP from relevant sections of the *Trade Practices Act*, make the current section inappropriate.³⁴³

However, the IPCRC considered that the vast majority of IP licences could fall within the categories identified by the NCC,³⁴⁴ and that the adoption of the NCC's recommendations would for that reason amount to a repeal of s 51(3).³⁴⁵

³³⁷ W M C Gummow, 'Abuse of Monopoly: Industrial Property and Trade Practices Control' (1973) 7 *Sydney Law Review* 339, 355.

³³⁸ Lawbook Co, *The Law of Intellectual Property: Copyright, Designs and Confidential Information*, vol 2 (at 24) [15.190].

³³⁹ Trade Practices Commission, *Application of the Trade Practices Act to Intellectual Property* (1991) 12.

³⁴⁰ See NCC, above n 328, 15–23.

³⁴¹ *Ibid* 243.

³⁴² IPCRC, Australian Government, *Review of Intellectual Property Legislation under the Competition Principles Agreement* (2000) ('*IPCRC Review*').

³⁴³ *Ibid* 212.

³⁴⁴ That is, price and quantity restrictions, and horizontal agreements.

³⁴⁵ IPCRC, above n 342, 213.

The IPCRC instead recommended that s 51(3) itself be repealed and the *TPA* amended to ensure

that a contravention of Part IV of the *TPA*, 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.³⁴⁶

The ACCC would also be required to issue guidelines as to the manner in which it would enforce these provisions, and a clearance process would be available, similar in operation to the ‘letters of comfort’ available under the ACCC’s *Merger Guidelines*.³⁴⁷

The IPCRC recommendations are open to criticism as they would retain perhaps the most uncertain element of the current *TPA* s 51(3) — whether or not a condition ‘relates to’ the IP right in question. Although the proposed ACCC guidelines might offer some guidance on this point, a significant degree of uncertainty will probably remain until the provisions are judicially considered. Given that only one case has considered s 51(3) since 1974, uncertainty as to the scope of the ‘relates to’ element could be expected to remain for some time.

The Australian Government accepted the recommendations of the IPCRC in part. In August 2001, the Government announced that *TPA* ss 46, 46A and 48 would ‘be treated as per the old subsection 51(3)’³⁴⁸ — that is, that no exemption would apply — and that IP licensing would be subject to the other provisions of Part IV.³⁴⁹ However, a contravention of the per se prohibitions of *TPA* ss 45 (horizontal agreements in restraint of competition), 45A (price-fixing) and 47 (third-line forcing), or of s 4D (exclusionary provisions) would ‘instead be subject to a substantial lessening of competition test.’³⁵⁰ Presumably, the Government’s intent is to allow licensors of IP to engage in those otherwise prohibited practices, so long as they do not significantly affect competition by doing so.

The amendments required to give effect to the Government response have not yet been introduced to Parliament and are unlikely to be introduced before 2007.

7 *Effect of the Proposed Amendments*

The question then is: how will the Government’s proposed amendments affect the ability of companies to engage in anti-competitive conduct in relation to the IP involved in DRM systems?

³⁴⁶ Ibid 215.

³⁴⁷ Ibid. See, eg, ACCC, *Merger Guidelines: June 1999* (1999) <<http://www.accc.gov.au/content/index.phtml/itemId/304397>>.

³⁴⁸ Australian Government, *Government Response to Intellectual Property and Competition Review Recommendations* (2001) 12 <<http://www.ipaustralia.gov.au/pdfs/general/response1.PDF>>.

³⁴⁹ Ibid.

³⁵⁰ Ibid 11–12.

Much will depend on the precise wording of the amendments. The Government's response refers only to 'a substantial lessening of competition test', which is disappointingly vague. Is the Government referring to:

- conduct which *results* in a substantial lessening of competition;
- conduct which *is likely to* result in a substantial lessening of competition;
- conduct which has the *purpose* of substantially lessening competition; or
- some combination of the above?

Nor is it certain in which market the substantial lessening of competition must occur. Is it the market for the IP rights themselves, the market for products or services produced using those rights or any market at all?

Even once these questions about the new test are resolved, proving a substantial lessening of competition in the context of conditions in the licensing of IP rights is likely to be difficult. The test requires a counterfactual analysis, as described in Part III(D). The difficulty here will be characterising the state of competition *without* the condition. The owner or licensor of the IP in question will almost certainly argue that, if they were not permitted to impose the impugned conditions when exploiting their IP, they would not have developed the IP in the first place.

This argument has some force. The creation of IP often requires significant investments of time, money and expertise. The ability for owners of IP to license it on discriminatory and sometimes anti-competitive terms affords them a degree of security and certainty of return, which encourages the investment necessary to create the IP.

If a court accepts that without the ability to impose the impugned conditions, the owner or licensor would not have created or licensed the IP at all, the substantial lessening of competition test cannot be satisfied.

Notwithstanding the difficulties in proving a substantial lessening of competition, the proposed amendments represent an improvement upon the current situation. The existing *TPA* s 51(3) suffers from significant flaws and uncertainties which are in dire need of correction. In those cases where a substantial lessening of competition can be shown, the availability of the *TPA* Part IV prohibitions will be a useful tool to prevent and deter anti-competitive conduct involving IP licenses.

IV CONCLUSIONS

Anti-circumvention laws have the legitimate policy objective of protecting the exclusive rights of copyright holders. But, in doing so, they threaten to impede competition in high technology markets. The interests of copyright holders must be balanced against the need for competition, and, while an appropriate balance may be difficult to strike, the current balance is an unsatisfactory one.

Legislators in many countries appear to have given insufficient consideration to the need for competition in markets where DRM is employed. In their desire to condemn tools to facilitate copyright infringement, legislators have prohibited the production of DRM-interoperable products unless they meet arbitrary and

restrictive conditions. In many cases, it may not be possible to produce or market DRM-interoperable products without running afoul of these laws. The result is a de facto legislative monopoly for the DRM owner to control the production of interoperable products.

Although the traditional rationale for DRM systems — or at least the one publicly espoused by copyright owners — is to prevent copyright infringement, DRM systems have given copyright owners a number of collateral benefits. A comprehensive right to control or prohibit competition in related markets, such as that which is provided by many DRM systems, may be more valuable to DRM owners and copyright holders than any associated reduction in the level of copyright infringement.

The US precedents discussed clearly illustrate that some companies are using the *DMCA* not to protect themselves from copyright infringement, but to protect themselves from competition. Judicial restraint in interpreting the relevant legislation and robust and competition-friendly exceptions to copyright have thus far prevented the worst of this abuse.

The final implementation of the *AUSFTA*, due on 1 January 2007, will result in an anti-circumvention regime whose potential anti-competitive effects exceed those of the *DMCA*, because of small but significant differences in the scope of copyright protection between Australia and the US.

Despite widespread and seemingly anti-competitive behaviour taking place using DRM, we are aware of only a few cases in which antitrust claims have been raised over such conduct. SCC filed a separate antitrust action against Lexmark in the US District Court in North Carolina. It was dismissed on purely procedural grounds.³⁵¹ CHE also raised antitrust issues in a counterclaim against StorageTek. Several of those claims were dismissed in summary judgment in StorageTek's favour, and the remainder have yet to be decided.³⁵² The third case was the unsuccessful 'essential facilities' case against Apple before the French competition authority.³⁵³ Two more class action lawsuits have been commenced against Apple in the US, alleging contraventions of the *Sherman Act* and unlawful tying in the context of Apple's iTunes and iPod products.³⁵⁴

There seems to be a great potential for future cases exploring the legality under competition law of using DRM to restrict competition, and we suggest that the paucity of current cases does not properly reflect the seriousness of the situation.

Part IV of the *TPA* might apply in some situations, but its effect will depend almost entirely on how the relevant markets are defined in each particular case. This in turn will depend heavily on the facts of each particular case and on expert evidence on economic issues and consumer behaviour. The uncertain scope of the *TPA* s 51(3) exception may complicate any attempts to establish

³⁵¹ US rules of civil procedure required that the antitrust claims should have been made as a counterclaim in the original action instituted by Lexmark: *Federal Rules of Civil Procedure* r 13(a) (2006). The separate action was dismissed without prejudice: *Static Control Components Inc v Dallas Semiconductor Corporation*, 56 Fed R Serv 3d (Callaghan) 307 (D NC, 2003).

³⁵² *Storage Technology Corporation v Custom Hardware Engineering & Consulting Ltd*, No 02'12102-RWZ, 2006 US Dist LEXIS 43690 (D Mass, 2006).

³⁵³ Conseil de la Concurrence, above n 13.

³⁵⁴ See *Tucker v Apple Computer Inc*, No 5:06-cv-04457-JW (ND Cal, filed 21 July 2006); *Charoensak v Apple Computer Inc*, No 5:05-cv-00037-JW (ND Cal, 2005, filed 3 January 2005).

unlawful exclusive dealing, and jurisdictional issues could prevent the effective use of Part IV against foreign corporations.

Two things are certain: anti-circumvention laws have great potential to be abused for anti-competitive purposes and the ability of current laws to effectively address such abuse is unclear and unproven.