

Copyright and Innovative Technologies

Pauline Sadler and Peter Sadler
School of Business Law and Taxation
Curtin University of Technology

Abstract

This article examines how the Australian legal system manages copyright issues related to the development of innovative technologies, focusing in particular on how the *Copyright Act 1968* (Cth) (CA) enforces the effect of 'technological protection measures' and 'access control protection measures' by proscribing the use of 'circumvention devices'. Cases referred to are *Autodesk v Dyason* [1992] HCA 2 and *Stevens v Kabushiki Kaisha Sony Computer Entertainment & Ors* [2005] HCA 58. Legislation discussed is the *Copyright Act 1968* (Cth), *Copyright Amendment (Digital Agenda) Act 2000* (Cth), *Copyright Amendment Act 2006* (Cth). Reference is also made to the Australia-United States Free Trade Agreement.

Introduction

The printing press, introduced into England in the 1460s or 1470s, is an early example of innovative technology.¹ Since then the legal system in England, and later in Australia, has struggled to deal with issues relating to the control of innovative technologies which enable the broad dissemination of information. These issues include censorship; in other words, control over the subject matter of the content, and copyright; in other words, control of the ownership of the content.

This article examines how the Australian legal system manages copyright issues related to the development of innovative technologies, focusing in particular on how the *Copyright Act 1968 (Cth) (CA)* enforces the effect of ‘technological protection measures’ (TPMs) and ‘access control protection measures’ (ACTPMs) by proscribing the use of ‘circumvention devices’. TPMs are the means by which the copyright in certain electronic products is protected: ‘A TPM is something designed to prevent or inhibit the infringement of copyright by allowing access only to authorised users (for example, by requiring a password) and/or through a copy control mechanism.’²

An ACTPM controls access to the work or other subject matter.³ A circumvention device is a ‘device, component or product (including a computer program)’, which nullifies the effect of the TPM/ACTPM.⁴ In April 2007 Australia acceded to the *WIPO Copyright Treaty (WCT)* and the *WIPO Performers and Phonograms Treaty (WPPT)*, as required by the Australia-United States Free Trade Agreement (AUSFTA). Both treaties have provisions referring to TPMs and circumvention devices. The preambles of both treaties are similar and refer to a desire ‘to develop and maintain the rights of authors’ (in the case of the WCT) and ‘performers and producers of phonograms’ (in the case of the WPPT). The preambles continue that the provisions were introduced in recognition of ‘the need to introduce new international rules and clarify the interpretation of certain existing rules in order to provide adequate solutions to the questions raised by new economic, social, cultural and technological developments’.⁵

The law of copyright is an attempt to balance the competing interests of the copyright owner, by providing a limited term monopoly, and the copyright user. The relevance to business in the context of TPMs/ACTPMs and circumvention devices has two aspects. On the one hand, companies such as the Sony Corporation invest heavily in innovative technologies and embed TPMs/ACTPMs into their products to prevent breach of their copyright. Their concern is that their economic interests should be protected by the proscription of circumvention devices. On the other hand, there are businesses who argue, for example, that

¹ F Siebert, *Freedom of the Press in England 1476-1776* (1952) 22-24, discusses the possibility of the date for the introduction of printing into England being some eight years earlier than 1476 when Caxton was credited with setting up the first press.

² Australian Copyright Council, *Information Sheet G50 Copyright and Computer software* (2005) 5 <www.copyright.org.au> at 27 April 2008.

³ *Copyright Act 1968 (Cth)* s 10(1).

⁴ *Copyright Act 1968 (Cth)* s 10(1).

⁵ <www.wipo.int/treaties> at 5 September 2008.

circumvention devices enable what would otherwise be legal uses as well as illegal uses of the product and that TPMs/ACTPMs are anti-competitive. Critics in the latter category include businesses whose sole function is either to manufacture circumvention devices, or to insert them into the product (or both).

A fundamental problem is that the legal requirements for the subsistence of copyright demonstrate a ‘hard copy’ mentality that does not always sit comfortably in the digital age. Ideas are not protected: ‘Copyright protection extends to expression and not to ideas, procedures, methods of operation or mathematical concepts as such’.⁶

The first requirement is for material form. The material form must be a Part III ‘work’, which includes original literary, dramatic, musical and artistic works, or Part IV ‘other subject matter’ which includes sound recordings, films, television broadcasts and sound broadcasts, and published editions of works. In the digital age the copyright claim may be with respect to something which is not even visible, for example electrical impulses.

The second requirement is that the ‘work’ or ‘other subject matter’ be original.⁷ The requirement is not for any high level of ingenuity or intellect; ‘... the Act does not require that the expression must be in an original or novel form, but that the work must not be copied from another work – that it should originate from the author’.⁸ For infringement to occur the copying must be of a ‘substantial’ part.⁹ In this context it is the quality of what is copied, in the sense of being an important part, that is assessed. In some circumstances this may be only a small part of the whole, for example a few bars from a musical composition that is instantly recognisable. In other circumstances the assessment may be of a more quantitative nature, looking at how much in total is copied.¹⁰ In the digital age it is often difficult to assess how much, or even what part, of a computer program is ‘substantial’ for the purposes of infringement.¹¹

The article begins with *Autodesk v Dyason* [1992] HCA 2 (*Autodesk*), an early High Court decision relating to a circumvention device. The article then examines the *Copyright Amendment (Digital Agenda) Act 2000* (Cth) which introduced the first of the provisions in the CA covering TPMs and circumvention devices. This is followed by a discussion of *Stevens v Kabushiki Kaisha Sony Computer Entertainment & Ors*

⁶ Australian Copyright Council, *Key points about copyright* (2008) <www.copyright.org.au> at 1 May 08; *Agreement on Trade-Related Aspects of Intellectual Property Rights* (TRIPS Agreement), 1994, art 9(2): ‘Copyright protection shall extend to expressions and not to ideas, procedures, methods of operation or mathematical concepts as such’.

⁷ *Copyright Act 1968* (Cth) pt III – Copyright in original literary, dramatic, musical and artistic works. Originality is an implied requirement for pt IV ‘other subject matter’; J McKeough, A Stewart and P Griffith, *Intellectual Property In Australia* (2004) para 6.15.

⁸ *University of London Press Ltd v University Tutorial Press Ltd* [1916] 2 Ch 607, 608.

⁹ *Copyright Act 1968* (Cth) s 14.

¹⁰ Australian Copyright Council, *Information Sheet GO63v08 Infringement* (2007) 2 <www.copyright.org.au> at 01 May 08.

¹¹ See, for example, *Autodesk v Dyason* [1992] HCA 2, and the associated criticism by the Copyright Law Review Committee in its report on *Computer Software Protection* (1995) para 5.24-5.25.

[2005] HCA 58 (*Stevens*). Consideration is then given to the *Copyright Amendment Act 2006* (Cth) which amended provisions in the CA relating to TPMs and circumvention devices, and including for the first time protection for ACTPMs. Finally there is a brief review of some of the criticisms of the protection currently given to ACTPMs by the CA.

The decision in *Autodesk Inc v Dyason*¹²

The facts of *Autodesk* centred on a form of TPM. In this case the High Court considered the definitions in s 10(1) of the CA, as amended by *Copyright Amendment Act 1984* (Cth).¹³ Autodesk, the applicants, owned copyright in a complex computer software program called AutoCAD, the CAD standing for ‘computer assisted drafting’. The program facilitates the making of complex three dimensional drawings for use in drafting architectural or engineering designs.¹⁴ To prevent piracy and restrict the use of the program to one computer only, which would increase sales, Autodesk developed an ‘AutoCAD lock’. The AutoCAD lock was a hardware lock which had to be plugged into the computer to enable the software to run on that particular computer. This operated in two parts; the first was a set of instructions in the software program known as the ‘Widget C’, the second was the AutoCAD lock itself.¹⁵ Every few seconds during the use of the AutoCAD program, Widget C would require the computer to challenge the AutoCAD lock, which would then respond to Widget C. If the response was deemed satisfactory by Widget C the program would continue to run, otherwise it would stop.¹⁶

The defendants, Peter Kelly, Patrick Dyason and Christine Dyason, manufactured and sold a device called the ‘Auto Key lock’, designed by Kelly, which duplicated the operation of the AutoCAD lock.¹⁷ Kelly devised the Auto Key lock with the use of an oscilloscope which read the electronic signals passing between the computer, the lock and the Widget C. Kelly then stored this information on a semiconductor chip which behaved in the same way as the AutoCAD lock. He did this without reverse engineering the AutoCAD lock, or the Widget C.¹⁸ AutoCAD cost about \$5,200, the Auto Key lock, which enabled the use of the AutoCAD program on more than one computer, and therefore made pirating easier, about \$500.¹⁹

Autodesk sued for infringement of copyright, on the basis that the Widget C was a computer program within the definition of ‘literary work’ in 10(1) of the CA, as amended by *Copyright Amendment Act 1984* (Cth). Autodesk was successful at trial before Northrop J, who gave a wide interpretation to the meaning of ‘computer program’ which for him brought the AutoCAD lock and the Auto Key lock within the definition.

¹² *Autodesk v Dyason* [1992] HCA 2 <www.austlii.edu.au> at 27 April 2008.

¹³ The *Copyright Amendment Act 1984* (Cth) amended the CA to include computer programs within the definition of literary works in s 10(1).

¹⁴ *Autodesk v Dyason* [1992] HCA 2, para 1 (Dawson J) <www.austlii.edu.au> at 27 April 2008.

¹⁵ *Autodesk v Dyason* above n 14, para 2.

¹⁶ *Autodesk v Dyason* above n 14, para 9.

¹⁷ *Autodesk v Dyason* above n 14, headnote.

¹⁸ *Autodesk v Dyason* above n 14, paras 14-15.

¹⁹ *Autodesk v Dyason* above n 14, paras 2-3.

He then found the latter to be a reproduction of the former. This was overturned on appeal to the Full Court of the Federal Court which held that neither the AutoCAD lock nor the Auto Key lock were, by themselves, a computer program.²⁰ The High Court unanimously found there to have been an infringement. Dawson J handed down the leading judgment, Mason CJ, Brennan J and Dean J in a joint judgment and Gaudron J in a separate judgment, concurring. Dawson J focussed on the operation of the Widget C which he found to be a computer program, and he found the AutoCAD lock to be a copy because the information in the AutoCAD lock matched a substantial part of the information in the Widget C. By copying the AutoCAD lock, the Auto Key lock infringed the copyright, Dawson J saying: 'But copyright may be infringed by copying something which is a copy of the copyright work; indeed that is the most common form of infringement.'²¹

Copyright Amendment (Digital Agenda) Act 2000 (Cth) amendments

The decision in *Autodesk* was criticised by the Copyright Law Review Committee (CLRC) in its 1995 report entitled *Computer Software Protection*.²²

If the reasoning applied by Dawson J is of general application and not confined to the facts of the *Autodesk case* (the Committee is not aware of any reason why it should be so confined), it follows that other things which may not qualify for separate protection under the Act as computer programs may nonetheless be protected if they can properly be characterised as a substantial part of a computer program. For example a screen display that is the user interface of an otherwise original program, but which has been designed to resemble the screen display of another program, may infringe copyright in that other computer program even though the actual instructions of the 'look-alike' program that generate the particular display are original.

The conclusion that the look-up table was a substantial part of the Widget C program, with the result that copying of the look-up table constituted copying of that program, causes the Committee some concern. Further, the conclusion that the creation of the look-up table in Autokey from observation of the operation of Widget C and the AutoCAD lock was a copying of the look-up table in Widget C, even though the maker of Autokey (Mr Kelly) never saw that table, is also viewed by the Committee as a far-reaching and questionable extension of copyright.

In its 1995 report the CLRC considered the protection of TPMs. While it was concerned by the approach of the High Court in the *Autodesk* case, it recognised that some protection should be afforded to the manufacturer. Submissions to the CLRC on the matter included the opinion that 'locking' a program was a way of protecting ideas; another point raised was that decompilation of locked programs should be permitted for the purposes of interoperability and error correction.²³ Connected to this was a reference to the computer game market which, by the use of TPMs, restricts the playing of games to those of the particular manufacturer. Concern was expressed that by protecting TPMs the monopoly of the console

²⁰ *Autodesk v Dyason* above n 14, paras 16-17, 24.

²¹ *Autodesk v Dyason* above n 14, paras 26-28.

²² Copyright Law Review Committee, *Computer Software Protection* (1995) paras 5.24-5.25.

²³ *Ibid* paras 10.90-10.92.

maker would be perpetuated.²⁴ Another submission suggested that ‘any provision relating to program locks should be carefully confined to ensure that such locks could not be used to circumvent exceptions to the rights of copyright owners’.²⁵ The ‘exceptions’ referred to are the ‘fair dealing’ (or defence) provisions in the *CA*, which permit limited use of ‘works’ or ‘other subject matter’ in certain circumstances. In the end the CLRC recommended that, subject to exceptions ‘for back-up copying, interoperability and error correction, the modification of a locked computer program for the purpose of circumventing the lock should be prohibited as should subsequent copying of such modified programs’.²⁶ The CLRC also recommended that the *CA* be amended to give copyright owners the right to prevent the ‘manufacture, importation, distribution and possession for commercial purposes’ of circumvention devices.²⁷

In 1996 two treaties containing provisions referring to TPMs and circumvention devices were concluded by the World Intellectual Property Organisation (WIPO) – the *WIPO Copyright Treaty* (WCT) and the *WIPO Performers and Phonograms Treaty* (WPPT), as mentioned earlier. These provided that contracting parties would give ‘adequate legal protection and effective legal remedies against the circumvention of effective technological measures ...’, for authors in the case of the former treaty and for performers and producers of sound recordings in the case of the latter.²⁸ The wording ‘adequate legal protection’ gives signatories some leeway in the manner in which they frame their legal remedies. Australia acceded to the WPPT and the WCT in April 2007, and they entered into force for Australia in July 2007.

In August 2000 the *Copyright Amendment (Digital Agenda) Act 2000* (Cth) was passed, and most of the provisions became effective on 4 March 2001. The amendments reflect some of the recommendations in the CLRC Report, and reflect also the above mentioned requirements for accession to the WCT and the WPPT. The importance of this legislation in the context of this article is that it introduced into the *CA* for the first time provisions relating to TPMs. Section 10(1) of the *CA* was amended to include a definition of both a TPM and a circumvention device, and in Part V (Remedies and Offences) was introduced a new Division 2A (Actions in relation to circumvention devices ...). These provisions have since been amended by the *Copyright Amendment Act 2006* (Cth), effective 01 January 2007, as a result of the obligations imposed on Australia by the AUSFTA. In the meanwhile the 2005 High Court decision in *Stevens v Kabushiki Kaisha Sony Computer Entertainment & Ors* (*Stevens*),²⁹ discussed later, had already demonstrated that the 2000 provisions, when construed narrowly, did not provide blanket protection for TPMs.

²⁴ Ibid para 10.93.

²⁵ Ibid para 10.93.

²⁶ Ibid para 2.29.

²⁷ Ibid para 2.73.

²⁸ *WIPO Copyright Treaty*, art 11 and *WIPO Performers and Phonograms Treaty*, art 18.

²⁹ *Stevens v Kabushiki Kaisha Sony Computer Entertainment & Ors* [2005] HCA 58.

The 2000 definition in section 10(1), said a ‘technological protection measure’ was a device or product designed in the ordinary course of its operation, to prevent or inhibit the infringement of copyright in a work. This was done either by limiting availability, so access can only be gained by means of an access code, or through a copy control mechanism. A ‘circumvention device’ was defined as device having only a limited or no commercial purpose other than the circumvention of a technological protection measure. Section 116A and s 116D, in the new div 2A of pt V, gave the owner, or exclusive licensee, of copyright protected by a TPM a right of action and remedies in certain circumstances. Section 116A enabled the copyright owner, or exclusive licensee, to bring an action against a person who carried out the unauthorised manufacture, sale, hire, advertising, marketing, distribution for trade, exhibition, or importation of a circumvention device to circumvent the TPM. Section 116D provided civil and criminal remedies for actions under s 116A. These provisions did not, however, proscribe the use of a circumvention device. This is in contrast to the legislation in the United States which implemented the WCT, the *Digital Millennium Copyright Act 1998*, by amending Title 17 of the United States Code. 17 USC §1201(a)(1)(A) provides ‘No person shall circumvent a technological measure that effectively controls access to a work protected under this title’.³⁰ It is noteworthy that both the Australian and the US approach to the regulation of circumvention devices fell within the broad provisions of the WCT.

The decision in *Stevens v Kabushiki Kaisha Sony Computer Entertainment & Ors*

As mentioned earlier, the High Court decision in the *Stevens* case tested the amendments to the CA made by *Copyright Amendment (Digital Agenda) Act 2000* (Cth) in respect of TPMs and circumvention devices. In this case the applicants, Sony, contended that Eddy Stevens had contravened s 116A of the CA because he had installed a circumvention device (which came to be called a ‘mod chip’) into the Sony PlayStation console to circumvent Sony’s TPM. The PlayStation is a console that contains no actual games. The games are stored on CD-ROMs which are bought separately by the user. To play a game, the CD-ROM instructs the hardware in the PlayStation console and a game is transmitted to a screen. A normal CD-ROM can be burnt (copied) with a conventional CD burner. To prevent the piracy of its games, Sony put an access code in a section of the CD-ROM that conventional CD Burners could not write to. This meant that the access code was not copied when the rest of the data on the CD-ROM was being duplicated. Sony’s PlayStation had an internal device, called a ‘boot ROM’, that prevented CD-ROMs without the access code from instructing the console. CD-ROMs that were manufactured in different regions of the globe were given different access codes. As a result a game that was bought in the United States, for example, could not be played on a console bought in Australia, a different region. This combination of access code in the CD-ROM and boot ROM in the console constituted the TPM, in a similar fashion to the Widget C and the AutoCAD lock in the AutoCAD product. Eddy Stevens, the respondent, who was unrepresented at trial, sold and installed ‘mod chips’. The mod chip was a device that allowed CD-ROMs without the requisite

³⁰ *Copyrights*, 17 USC §1201 (2007). Circumvention of copyright protection systems (a) Violations regarding circumvention of technological measures (1)(A) <www.law.cornell.edu/uscode/17> at 1 May 2008).

access code to instruct the Sony PlayStation, thus enabling pirated CD-ROMs, and also CD-ROMs legally purchased in other regions such as the United States, to be played on Australian PlayStations.

At trial, before Sackville J, the Australian Competition and Consumer Commission (ACCC) was given leave to appear as *amicus curiae*. The ACCC contended that that Sony's TPM was not, in the ordinary course of its operation, designed solely to prevent the infringement of copyright. The TPM was designed to inhibit the use of unauthorised copies of Sony's works, including copies lawfully acquired from abroad. Accordingly, argued the ACCC, Stevens had not contravened s 116A as the TPM did not fall within the definition of TPM under s 10(1).³¹

The ACCC's narrow interpretation of 10(1) was based on policy rather than legislative intention. They believed that Sony's device was implemented not only to prevent copyright infringement but also to create market segregation and limit competition. There are three regions for PlayStation games, North America, Japan (covering all of Asia) and Europe (including Australia). In a media release explaining the basis of the *amicus curiae* intervention, the ACCC commented: '... unfortunately Australian consumers still have to endure a significantly smaller range of game titles, at much higher prices, and for which it is not uncommon to be officially released into the Australian market well after they are released overseas'.³²

Sony's response to the ACCC argument was that the definition of TPM in section 10(1) was satisfied so long as the protective devices, as a practical matter, minimised the incentive for persons to copy PlayStation games as a prelude to playing the copies on the PlayStation.³³ Finding for Stevens, Sackville J preferred the ACCC's narrow interpretation of s 10(1) stating:³⁴

[A] 'technological protection measure', as defined, must be a device or product which utilises technological means to deny a person access to a copyright work, or which limits a person's capacity to make copies of a work to which access has been gained, and thereby 'physically' prevents or inhibits the person from undertaking acts which, if carried out, would or might infringe copyright in the work. It is in this sense that the device or product must be designed, in the ordinary course of its operation, to prevent or inhibit the infringement of copyright in a work ... I do not think the definition is concerned with devices or products that do not, by their operations, prevent or curtail specific acts infringing or facilitating the infringement of copyright in a work, but merely have a general deterrent or discouraging effect on those who might be contemplating infringing copyright in a class of works.

In Sackville J's view a TPM had to be something that prevented the actual infringement of copyright from occurring. It was all a matter of timing: the PlayStation itself did not enable the unauthorised copyright

³¹ *Kabushiki Kaisha Sony Computer Entertainment v Stevens* [2002] FCA 906, para 107(Sackville J) <www.austlii.edu.au> at 27 April 2008.

³² ACCC, 'ACCC defends the rights of Playstation owners' (Press Release, 8 February 2002) <www.accc.gov.au> at 27 April 2008.

³³ *Kabushiki Kaisha Sony Computer Entertainment v Stevens*, above n 31, para 111.

³⁴ *Kabushiki Kaisha Sony Computer Entertainment v Stevens*, above n 31, para 115.

infringement of the CD-ROMs to take place. Instead the TPM was there to prevent the use of CD-ROMs which were the result of previous unauthorised copying. It is important to note that if it were not for the narrow construction of s 10(1), Sackville J:³⁵

... would have held that the chips installed by Mr Stevens had only a limited commercially significant use other than circumventing or facilitating the circumvention of the access code. Thus, if the access code had been a ‘technological protection measure’, the chips would have been circumvention devices.

On appeal to the Full Court of the Federal Court, before French, Lindgren and Finkelstein JJ, the major point of difference between the primary judge and Full Court was the meaning of TPM as defined in s 10(1) of the CA. The Full Court held unanimously that the definition of TPM in 10(1) covered Sony’s TPM, but their Honours followed different reasoning in coming to the same conclusion.³⁶ In broad terms it could be said, however, that their Honours took a purposive approach when interpreting the relevant legislative provisions (i.e., they looked at the ‘purpose’ of the provisions). French J addressed the policy construction of 10(1) favoured by Sackville J:³⁷

In my opinion the proper construction of s 116A and the definition of ‘technological protection measure’ flows from a consideration of the ordinary and grammatical meaning of its language. There may be all manner of powerful policy considerations which can be extracted from the legislative history and other materials referred to in this case which favour the narrower reading of the definition of ‘technological protection measure’ preferred by the learned primary judge ... In the end, in my opinion, it is for the legislature to spell out the limiting words which may respond to such considerations. It is not for the Court to cage the ordinary meaning of the words which have been adopted by reference to policy considerations of its own divining.

In the application to the High Court where Stevens sought special leave to appeal, Kirby J made the following observation:³⁸

The history of this form of technology has been one of struggle between those who have wanted to protect their intellectual property and those who have wanted to spread knowledge and ideas. I remember from the old days of the wire recorder at the very earliest days people were copying them and then came the sound recordings and then the video recording. There have always been people wanting to get at the ideas that are in them. One’s inclination is not to strike that down unless the law is clear, but on the other hand to give effect to the purpose of Parliament.

In essence the task of the High Court was one of statutory interpretation of s 10(1).³⁹ One of the principal issues for the justices who heard this case as it progressed through the appeal process was that the

³⁵ *Kabushiki Kaisha Sony Computer Entertainment v Stevens*, above n 31, para 167.

³⁶ *Kabushiki Kaisha Sony Computer Entertainment v Stevens*, above n 31, paras 2, 12, 21, 25, 139, 189.

³⁷ *Kabushiki Kaisha Sony Computer Entertainment v Stevens* [2003] FCAFC 157, para 25 (French J) <www.austlii.edu.au> at 27 April 2008.

³⁸ *Stevens v Kabushiki Kaisha Sony Computer Entertainment & Ors* [2004] HCA Trans 273 (6 August 2004) (Kirby J) <www.austlii.edu.au> at 27 April 2008.

³⁹ *Stevens v Kabushiki Kaisha Sony Computer Entertainment & Ors* [2005] HCA 58, para 30 (Gleeson CJ, Gummow, Hayne and Heydon JJ); para 102 (McHugh); para 168 (Kirby J) <www.austlii.edu.au> at 27 April 2008.

legislation did not specifically proscribe the ‘use’ of a circumvention device, unlike the USA, as noted earlier. The High Court made reference to this omission, saying on either construction the Justices were forced to imply legislative intention: ‘The result is that in the present case to fix upon one “purpose” and then bend the terms of the definition to that end risks “picking a winner” where the legislature has stayed its hand from doing so.’⁴⁰

In the end the High Court held unanimously that the TPM applied by Sony did not prevent infringement of copyright. The device only prevented access after infringement had occurred. Consequently, it was not covered by the definition of TPMs under 10(1), and s 116A was not contravened.⁴¹

Copyright Amendment Act 2006 (Cth)

As mentioned earlier, the CA was amended, effective 01 January 2007, to comply with the obligations imposed on Australia by the AUSFTA. Section 10(1) now defines a ‘technological protection measure’ as an ‘access control technological protection measure’ or a device, used by the owner of the copyright in a work that, in the normal course of its operation, ‘prevents, inhibits or restricts the doing of an act comprised in the copyright’.⁴² An ‘access control technological measure’, included in the CA for the first time, is defined in s 10(1) as a device which ‘in the normal course of its operation, controls access to the work or other subject matter’. Unlike the definition of a TPM, there is no reference here to preventing, inhibiting or restricting an act comprised in the copyright. Under the revised s 10(1) definition, a ‘circumvention device’ for a technological protection measure is defined as a device that ‘is promoted, advertised or marketed as having the purpose or use of circumventing the technological protection measure; or ... as a device that has only a limited commercially significant purpose or use, or no such purpose or use, other than the circumvention ...’. This reform to the CA broadens the classifications of technological protection measure and circumvention device to the position where it is now harder to be excluded than it is to be included. Section 10 (1) outlines two exceptions to the definition of ‘technological protection measure’. Firstly, the definition expressly excludes devices that control geographic market segmentation by preventing the playback in Australia of a non-infringing copy of the work, a clear response to the *Stevens* case. Secondly, the definition expressly excludes devices that restrict the use of goods or services in relation to the device. For example, a protection measure that prevents third parties from making generic spare parts for a product that has copyright protection will not fall within the scope of this definition.⁴³ These two exceptions are permissible under Article 17.4.7(e)(viii) of the AUSFTA and the first one allays some of the concerns expressed by the CLRC and the ACCC.

⁴⁰ *Stevens v Kabushiki Kaisha Sony Computer Entertainment & Ors*, above n 39, para 34 (Gleeson CJ, Gummow, Hayne and Heydon JJ).

⁴¹ *Stevens v Kabushiki Kaisha Sony Computer Entertainment & Ors*, above n 39, para 92 (Gleeson CJ, Gummow, Hayne and Heydon JJ); para 107 (McHugh); para 228 (Kirby J).

⁴² Section 10(1): a ‘device’ can be a product, technology, component or a computer program. The owner can be someone that has been granted a licence to, or given permission to, restrict access to the work of the owner. Work can also be other subject matter.

⁴³ Explanatory Memorandum, Copyright Amendment Bill 2006 (Cth) 12.33.

The revised Division 2A of Part V replaces s 116A with ss 116AN, 116AO and 116AP. Section 116AN simplifies the rights of the copyright owner with respect to an ATPM. Now a copyright owner may bring an action where a work (or other subject matter) is protected by an ACPM, and 'a person does an act that results in the circumvention' of the ACPM, and that 'person knows, or ought reasonably to know, that the act would have that result'. In short, it is now illegal to circumvent an ATPM. There are a number of exceptions provided for in s 116AN; these are where the copyright owner grants permission, for the purposes of interoperability, encryption research, computer security testing, online privacy, law enforcement and national security, libraries and prescribed acts. Section 116AO and 116AP respectively enable a copyright owner to bring an action against a 'manufacturer' and a 'provider' of 'a circumvention device for a technological protection measure' (as noted earlier, the s 10(1) CA definition of TPM includes both TPMs and ACPMs). Section 116AQ grants relief of injunction, damages and delivery up of the circumvention device.

Conclusion

This article examines how the Australian law of copyright has managed the protection of a particular type of innovative technology, TPMs and, more recently, ACPMs. The CA has been amended twice, once in 2000 and again in 2006 in order to fulfil obligations arising from international treaties and the AUSFTA by proscribing the use in certain circumstances of circumvention devices. The 2000 amendments introduced protection for TPMs for the first time, and the necessity for the 2006 amendments demonstrate the speed at which developments occur in this area of technology. These developments are in the nature of the technology itself, and in the nature of the copyright protection that ensues. The changes made by the 2006 amendments illustrate the difficulty in achieving and maintaining balance between the competing interests of copyright owners and copyright users in an environment far removed from the origins of copyright.