



# COMPUTERS & LAW

Journal for the Australian and New Zealand Societies  
for Computers and the Law

Editors: Lesley Sutton and Belinda Justice  
Number: 50

ISSN 08117225  
December 2002

## "Digital Agenda" provisions fail to protect PlayStation from anti-counterfeiting device

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By the *Copyright Amendment (Digital Agenda) Amendment Act 2000* (Cth), the Federal Government introduced section 116A into the *Copyright Act 1968* (Cth) (the "Copyright Act") intended to protect copyright owners who use "technological protection measures" to prevent counterfeiting activities from the supply by others of means to bypass or "circumvent" such protective measures.

At the time, these provisions were

criticized in that:

1. they introduced a concept of "intention" with respect to the technological protection measure - the purpose of the alleged technological protection measure to be protective in a particular fashion has to be proved; and
2. they seemed to relate only to devices which prevent access to a work by a "code or process" or which prevent the act of copying.

Hence, it has been observed, the amendments would not even have addressed the type of anti-piracy protection represented by the device the subject of the decisions of the High Court in *Autodesk v Dyason*<sup>1</sup> which one might have expected to be prominent in the minds of those drafting the legislation.

These chickens have come home to roost in a decision of Sackville J of the Federal Court handed down in

*Continues page 3*

### **In this issue:**

"Digital Agenda" provisions fail to protect PlayStation from anti-counterfeiting device.....	1	Phone books, databases and copyright – the case of Telstra.....	17
<i>Peter Knight and John Corker</i>		<i>Anton Joseph</i>	
Business method patents: one click and they're here to stay.....	7	Race hate and the internet.....	21
<i>Kim O'Connell and Neil Murray</i>		<i>Laura Seeto</i>	
Explanatory rule maps.....	11	US bill allows copyright owners to target P2P networks.....	23
<i>Pamela N. Gray</i>		<i>John Natal</i>	
Cyberlaw: Cases and Materials on the Internet, Digital Intellectual Property and Electronic Commerce: Book Review.....	14	High Court delivers internet defamation judgment.....	25
<i>Graham Bassett</i>		<i>Trevor Jeffords &amp; Irene Zeitler</i>	

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## "Digital Agenda" provisions fail to protect PlayStation from anti-counterfeiting device

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Continued from page 1

*Kabushi Kaisha Sony Computer Entertainment Inc v Stevens.*<sup>2</sup>

The Court found that the protection measures identified by Sony in their PlayStation 2 console that were circumvented by a 'mod chip' installed by the defendant were designed, in the ordinary course of their operation, to deter or discourage persons infringing Sony's copyright in the PlayStation games.

However, despite this finding, the Court found that these measures were not "technological protection measures" as this phrase is defined in the Copyright Act. This was said to be because the measures were not designed to function, by their own processes or mechanisms, to prevent or hinder acts that might otherwise constitute an infringement of copyright. Accordingly Sony's claim under section 116A of the Copyright Act failed.

It is a disturbing footnote to this decision that this outcome was instigated by the Australian Competition and Consumer Commission (the "ACCC"), which intervened in the proceedings on behalf of the defendant counterfeiter.

### The facts

The protection measure argued by Sony to be a "technological protection measure" for the purposes of the Copyright Act was a "Boot ROM" located on the circuit board of the PlayStation 2 (PS2) console which embodied a particular program designed to read and verify the access codes stored on the boot track of the PlayStation 2 CD-ROMs or DVDs. If the access codes were not present in the boot track of the CD-ROM or DVD, or were incorrect, then the CD-ROM or DVD would not work. The PlayStation CD-ROMs and DVDs were designed so that the access codes could not be copied onto blank CDs or DVDs, so that an illegal copy would be useless. This is an extremely common form of protection for computer programs.

Sony also used the access codes to "regionalize" CD-ROMs and DVDs. The boot track access codes could be

made different for different geographical regions, so that even genuine Sony CD-ROMs sold in the United States, say, would not work in Australia or other parts of the world. This was the issue which brought the ACCC into the proceedings - notwithstanding the defendant in the proceedings was actually selling counterfeits. The ACCC took the position that regional coding is detrimental to consumer welfare as it limits consumer choice and in some cases, access to competitively priced goods, which might be imported from overseas markets. Mr Stevens was unrepresented and the ACCC was given leave to appear as *amicus curiae* by the court.

Mr Stevens sold and installed "mod chips" for PlayStation 2 consoles. He also sold illegal copies of PlayStation 2 games (referred to in this article as "Bali Silvers"). The "mod chip" had the effect of modifying the PlayStation console such that any CD-ROM inserted into the drive of the PS2 could be played regardless of whether it was genuine or whether it was a Bali Silver. It did this by instructing the console that both the validity and territorial codes were acceptable for operation of the console.

### What is a "technological protection measure"?

Sony claimed under section 116A of the Copyright Act that Mr Stevens had sold a circumvention device capable of circumventing a technological protection measure that was protecting works owned by Sony.

**Technological protection measure** is defined in section 10(1) of the Copyright Act 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, un-scrambling or other transformation of the work or other subject-matter) with the authority of the owner or licensee of the copyright;*

b) *through a copy control mechanism.*

### Did Sony's "Boot ROM" device have the appropriate purpose?

The ACCC argued that a device could not be "designed, in the ordinary course of its operation, to prevent or inhibit the infringement of copyright" unless this was its sole purpose. The protection measures identified by Sony had a number of purposes. One was to prevent CD-ROMs that were manufactured for different world regions being played in the console sold in Australia. Another was to prevent unauthorised copies of CD-ROMs being played in the console. The Court rejected a sole purpose test and, whilst stopping short of considering a primary purpose test, accepted that a device can be designed to achieve two or more objectives without it being taken outside the definition of a "technological protection measure".

### Did Sony's "Boot ROM" device have the effect of preventing access or preventing copying?

The fact is, like all such devices, the "Boot ROM" system did *not* prevent copying at all. It *did* prevent access to the work, but not by means of an access code or process supplied by Sony, of the nature described in the wording of the definition. The problem was, the wording of the definition was so poorly drafted that it was too narrow to apply to one of the most common forms of protection methods.

Sony argued for a broad interpretation of "technological protection measure"

## **"Digital Agenda" provisions fail to protect PlayStation from anti-counterfeiting device**

so as to include a device which had the practical effect of inhibiting the infringement of copyright. The argument was put that the protection measures identified by Sony stopped pirated copies of CD-ROMs being played and so, indirectly, by rendering infringing copies unsaleable, inhibited copyright infringement.

After a lengthy analysis of the development of the Australian provision, the Court rejected this argument, particularly because of the words "in the ordinary course of its operation" in the definition of "technological protection measure".

His Honour said:

*The definition is intended to be confined to devices or products that utilise technological process or mechanisms to prevent or curtail specific actions in relation to a work, which actions otherwise infringe or facilitate infringement of copyright in that work.*<sup>3</sup>

In other words the practical effect was PlayStation 2's protection measures did not, in their ordinary operation, prevent actions that would otherwise be a copyright infringement. For example placing a Bali Silver in a PS2 was not of itself a copyright infringement. The infringement, being a reproduction of a genuine Sony PlayStation CD-ROM without Sony's permission, took place when the Bali Silver was first made.

### **RAM issue**

Sony sought to argue, in the alternative, that its protection devices did in fact prevent a user from infringing copyright by preventing the user reproducing a substantial part of a work namely, a substantial part of an unauthorised CD-ROM reproduced into the console's Random Access Memory (RAM). It also argued that embodiment of a substantial part of a cinematographic film was occurring when the game was loaded into the RAM of the PlayStation 2 console.

Whether a copy made in a computer's RAM constitutes a reproduction of the program in material form has been considered in a number of Australian

cases. His Honour referred to the Federal Court decision in *Dyason v Autodesk Inc*,<sup>4</sup> *Microsoft Corporation v Business Boost Pty Ltd*<sup>5</sup> and *Australian Video Retailers Association Ltd v Warner Home Video Pty Ltd*.<sup>6</sup>

The key concept is "material form" defined as follows:

*material form, in relation to a work or an adaptation of a work, includes 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.*

This definition was introduced by the Copyright Amendment Act 1984 (Cth). Again, this poor drafting has been criticised - and indeed the decision in *Pacific Gaming Pty Limited v Aristocrat Leisure Industries Pty Limited*<sup>7</sup> confirmed this criticism - because a computer program cannot always be "reproduced" from forms of storage such as integrated circuits, CDs or floppy disks, in the sense determined in *Apple Computer Inc v Computer Edge Pty Limited*,<sup>8</sup> at best only a machine code version being capable of being derived. The Explanatory Memorandum to the Copyright Amendment Act at that time said:

*The definition of material form includes such storage methods as storage or reproduction on magnetic tape, read only or random access computer memory, magnetic or laser disks, bubble memories and other forms of storage which will doubtless be discovered.*

However, despite this reference in the Explanatory Memorandum to storage in RAM, the finding in this case essentially follows from and expands on the finding in the *AVRA v Warner* case. The key fact that will determine whether storage of a work or a substantial part of a work in RAM is stored in a "material form" will be whether it can, in the ordinary course, be reproduced from RAM. In *AVRA v Warner*, the court said "in the ordinary course, temporary storage of a substantial part of the computer program in the RAM of a DVD player

will not involve the reproduction of the computer program in a material form." Likewise in this case the PlayStation 2 itself provided no mechanism by which a copy from the console's RAM could be made.

Sony argued that section 21(1A) of the Copyright Act, inserted by the Copyright Amendment (Digital Agenda) Amendment Act 2000 (Cth) solved the problem, as indeed the Court in the *Pacific Gaming* decision intimated that it had. Section 21(1A) states:

*For the purposes of this Act, a work is taken to have been reproduced if it is converted into or from a digital or other electronic machine-readable form, and any article embodying the work in such a form is taken to be a reproduction of the work.* (emphasis added).

His Honour responded by saying "whilst this argument has some attraction, I think it pays too little attention to the significance of the words "in a material form" in section 31(1)(a)(i) of the Act". Surprisingly, his Honour then looked at dictionary definitions of the word "material" seeming to go behind the definition of "material form" in the Copyright Act and said:

*... It's difficult to say that the program has been reproduced "in a material form", given that what is stored in RAM is essentially electronic impulses. In other words, the material stored in RAM is incorporeal in character.*<sup>9</sup>

His Honour then went on to suggest that this distinction was based on a policy that only protected copying which was itself capable of further reproduction and said:

*Commercial considerations aside, there is presumably nothing to prevent the applicants designing the PlayStation console and its software so that the portion of the program stored in the console's RAM can be reproduced. If it did so, there would seem to be little doubt that the protection device would be*

## **"Digital Agenda" provisions fail to protect PlayStation from anti-counterfeiting device**

capable of being a "technological protection measure".<sup>10</sup>

This is a very disturbing aspect of this decision. Truly, it could be said, if *Apple Computer Inc v Computer Edge Pty Limited* were heard again today, on this reasoning Apple would fail again!

### **UK Position**

This outcome is in contradistinction to a similar case run in the United Kingdom where Sony successfully obtained an order that such "mod chips" were circumvention devices.

In *Kabushi Kaisha Sony Computer Entertainment Inc. & Others v Edmunds (t/a Channel Technology)*,<sup>11</sup> Sony claimed that an importer of a "mod chip" known as "the messiah" had contravened section 296 of the *Copyright Designs and Patents Act 1988* (the "CDPA"), that deals with copyright infringement by means of any device or means specifically designed or adapted to circumvent copy-protection. Based on the facts of the UK case it seems that this chip had the same effect that the "mod chips" in Australia have, that is to enable CD-ROMs that are counterfeit and/or from other regional zones to play on the PS2 console sold in the UK.

Section 296(4) of the CDPA reads as follows:

*References in this section to copy-protection include any device or means intended to prevent or restrict copying of a work or to impair the quality of copies made.*

It is also noted that in the CDPA "reproducing the work in any material form" includes storing the work in any medium by electronic means, and hence does not suffer from the same defect as the Australian Copyright Act.

As a result of these definitions, it was not disputed that the "Boot ROM" system and the embedded codes put into genuine CD-ROMs and DVDs by Sony constituted the type of copy-protection envisaged by section 296 of the CPDA, the copying intended to be prevented being the loading of the

game into the computer.

The UK court also noted that chipped consoles were likely to be used on a considerable scale for reading pirate works.

### **USA Position**

In the United States of America, the Digital Millennium Copyright Act 1998 (the "DMCA") provisions have, as one of their intentions, to combat copyright piracy in its earlier stages, before a work is even copied. The US provisions criminalise the manufacture, importation, offer to the public, provision or trafficking in any technology that is primarily designed or produced for the purpose of circumventing one of two kinds of technological protection measures.

Technological protection measures can be either those that:

- effectively control access to a work; or
- effectively protect a right of a copyright owner in a work.

These "access control" provisions are understood by the US courts to "target the circumvention of digital walls guarding copyrighted material."<sup>12</sup> A technological protection measure "effectively controls access to a work" if the measure, in its ordinary course of operation, requires the application of information, or a process or a treatment, with the authority of the copyright owner, to gain access to the work.<sup>13</sup> The Sony PS2 measures would seem to clearly fall within the terms of these provisions.

It is only the second form of technological protection measure recognised in US law that is akin to the Australian law. That protection measure "effectively protects a right of a copyright owner" if the measure, in its ordinary course of operation, prevents, restricts, or otherwise limits the exercise of a right of a copyright owner.<sup>14</sup>

### **Conclusion**

The reason for the difference between the UK and the Australian outcomes seems to lie with the wording of the

relevant provisions and more particularly that the UK law, unlike the Australian law, recognises that reproducing a work in a material form includes storing the work in any medium by electronic means.

The US law, unlike the Australian law, effectively prohibits circumvention of the 'anti-pirate' measures used in devices such as the Sony PlayStation by explicitly protecting measures that are primarily designed to control access to a work.

All these laws have been derived from the provisions of the WIPO Copyright Treaty and WIPO Performances and Phonograms Treaty that require:

*Contracting Parties to provide adequate legal protection and effective legal remedies against the circumvention of effective technological measures that are used in connection with the exercise of rights under the relevant 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.*<sup>15</sup>

The treaty provisions provide scope for countries to adopt different definitions of "effective technological measures". Australia's more prescriptive terms have meant that its laws are less protective of copyright circumvention devices than those of the UK and the US but have had the effect of permitting a device that overrides the regional country code restrictions of imported CDs.

The policy issues underlying how the law should operate in this instance are complicated by technological measures often having a number of different purposes and effects. The US law requires that the device be *primarily* designed as a technology protection measure. In *Sony v Stevens*, Sackville J says the fact that a device is said to be designed to achieve two or more objectives does not take it outside the definition of a "technological protection measure". He suggests there may be a question as to whether a device is primarily designed to achieve a particular purpose but it was unnecessary to decide that in this case.

Three of the objectives of the

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## "Digital Agenda" provisions fail to protect PlayStation from anti-counterfeiting device

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protection measures in the PS2 system are:

- the prevention of playing of CD-ROMS with other regional coding;
- the prevention of playing of pirated copies; and
- the prevention of playing of back-up copies.

Each of these raise different policy considerations. The challenge is to have laws that allow each to be separately addressed. The inability of the law to differentiate between different purposes has led to the rather

unfortunate spectacle of the ACCC appearing in legal proceedings and successfully advocating arguments in support of a counterfeiter.

The decision highlights many flaws in the drafting of the Copyright Act with respect to the protection of computer programs which are long overdue for correction.

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- 1 (1992) 173 CLR 1; 22 IPR 163; (1993) 25 IPR 33.
  - 2 [2002] FCA 906 (26 July 2002).
  - 3 Ibid.
  - 4 (1989) 24 FCR 147.
  - 5 (2000) 49 IPR 573.
  - 6 (2001) 53 IPR 242.

- 7 [2001] FCA 1636.
- 8 (1986) 161 CLR 171; 6 IPR 1 (26 November 2000).
- 9 [2002] FCA 906 (26 July 2002) para 147.
- 10 Ibid para 150.
- 11 [2002] EWHC 45 (CH).
- 12 US Second Circuit Court of Appeals, *Universal v Reimerdes* (NY2600/DeCSS Case) Nov 28, 2001, at 15.
- 13 Section 1201(a)(3)(B) of the DMCA.
- 14 Section 1201(b)(2)(B).
- 15 Article 18 of the WPPT "Obligations Concerning Technological Measures (<http://www.wipo.org/eng/diplconf/distrib/95dc.htm>) and Article 11 of the WCT in identical terms (<http://www.wipo.org/eng/diplconf/distrib/94dc.htm>).

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## The Copyright Directive - UK Implementation - What does it do?

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The Directive on Copyright in the Information Society (2001/29/EC) (the 'Directive') was adopted on 22 May 2001 and is to be implemented in the UK and other Member States by 22 December 2002. The Directive harmonises rights in certain fundamental areas, mainly to address the challenges of the Internet and e-commerce, and digital technology more generally. It also grants certain exceptions to these rights and legal protection for technological aspects of rights management systems. The highlights of the Directive include the exclusive right of production for authors and other right holders, a general exclusive right of communication to the public for authors, including what is known as the Internet 'making available' right, development of an exclusive right of distribution, establishing a mandatory exception to liability for certain temporary acts of reproduction, legal obligations to protect against circumvention of technological protection measures and other provisions that deal with sanctions and remedies.

The Patent Office has published a consultation document on the implementation of the Directive in the UK which can be found on their website ([www.patent.gov.uk](http://www.patent.gov.uk)). The consultation sets out the ways in which the Directive will amend existing legislation, and in particular the Copyright, Designs and Patents Act 1988, as amended by the Broadcasting Acts of 1990 and 1996 and by secondary legislation implementing earlier EC Directives in the copyright and related rights field. The law in the UK currently forms a strong basis for dealing with the new technological challenges. Consequently, the Patent Office is suggesting that amendments to the UK legislation are generally technical in nature. The Patent Office therefore consider that the significant amendments necessary to comply with the Directive are:

- introduction of performers' exclusive rights (as opposed to the current remuneration rights) to control "on-demand"

transmissions of recordings of their performances;

- amendments to comply with the regime of compulsory and permitted exceptions;
- amendments to cater for the more comprehensive legal protection for technological systems;
- introduction of new provisions for the protection of electronic rights;
- management information set out in Article 7; and
- improvements to sanctions and remedies.

The paper on the Patent Office website contains a number of more detailed amendments which can be reviewed online.

*(This article was supplied courtesy of Linklaters and Alliance, Information Technology & Communications, Issue 19, October 2002.)*