

# **The Chilling Effect of Anti-Circumvention: Amending the European Union Copyright Directive (2001/29/EU) Before the Implementation Deadline**

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December, 2002**

## **I. Introduction**

On March 6, 2002, the World Intellectual Property Organization (WIPO) enacted a copyright treaty with the U.S. and twenty-nine other countries. The treaty requires that the member nations make significant efforts to update their copyright laws to respond to the increasing challenges brought about by digital technology developments.<sup>i</sup> After closely monitoring the implementation of the Digital Millennium Copyright Act (DMCA)<sup>ii</sup>, the United State's response to compliance with the WIPO Copyright Treaty enacted in 1998, the EU responded to Article 11 by writing the European Union Copyright Directive (EUCD), titled 2001/29/EU. The deadline for the submission of amendments to the draft EUCD report was on November 8, 2002. The vote in the Legal Affairs and Internal Market Committee passed on November 21, 2002, and the proposal will go before the Plenary by December 11<sup>th</sup> of this year. By December 22, 2002, each member state of the European Union must decide how to incorporate the EUCD into their national copyright laws providing that no government challenges the Directive at the EU Parliament before the implementation date.

Derived from the DMCA, the EUCD contains many of the same provisions intended to protect copyrighted works, but also has assimilated certain provisions of the DMCA that have raised significant controversy and resulting litigation in the United States.<sup>iii</sup> Specifically, the DMCA's anti-circumvention and anti-trafficking provisions in sections 1201 (a)(2) and (b)(1)

have eradicated many legitimate fair uses of copyrighted materials.<sup>iv</sup> These provisions of the DMCA have caused an intellectual boycott of the United States by such well-known programmers as Alan Cox, a Linux kernel programmer, who refuses to bring his work to the United States.<sup>v</sup> Aside from the resulting intellectual trepidation, the anti-circumvention and anti-trafficking provisions in the DMCA have also raised significant concern for the individual copyright user.

This memorandum suggests that three steps should be taken before the EU nations are required to implement the EUCD. First, the committee overseeing the development of the EUCD must ensure that the provisions do not conflict or detract from existing European copyright laws. Copyright statutes in the United States and Germany contain the broadest fair use doctrines, but most European nations also have some form of fair use in their copyright laws.<sup>vi</sup> For example, Britain's doctrine is called "fair dealing" and contains the same fair use rights as American Copyright Law, excluding the right to parody. Thus, while digital media presents more challenges for the copyright owner to protect his or her work, that material, once purchased by a consumer in any European nation, should contain the same copyright rights to fair use as any non-digital copyrighted work.

Second, in the EU's attempt to discourage digital piracy, the text of the EUCD should not ignore the rights of the paying consumer to use his or her technology in conjunction with purchased copyrighted material. The individual user should have the right to circumvent access controls to use the copyrighted material on a digital media as long as it is a fair use of the material. Furthermore, penalties for the individual copyright user should not render harsh results when the user attempts to make fair use of copyrighted material by circumventing access controls or trafficking in an anti-circumvention device. Unfortunately, little significant public

debate in any EU nations has surfaced over the EUCD even though it will have a major impact on the citizens of each member state.<sup>vii</sup>

Finally, the EU should ensure that the EUCD does not contain similar restrictions on the fair use of digital copyrighted materials that could potentially detract from the fair use provisions found in traditional European copyright laws. Without protection for fair use of copyrighted material, the advancement of digital technology would not continue to develop and spread at the fact pace that it has in the past decade. For these reasons, the EU must amend the Directive to include a fair circumvention provision or more broadly define the exceptions to the anti-circumvention provisions to allow for fair use purposes. This memorandum will propose two methods of amending the EUCD to establish a more effective balance between the rights of the copyright owners and the rights of individual users. Without a fair circumvention or fair trafficking amendment, the Directive has the potential to discourage and hinder the development of technology in Europe in the digital media.

## **II. The Threat of the EUCD on the Spread of Technology in Europe**

Presented to the EU on February 14, 2001, the preliminary draft of the EUCD attempted to provide a standard copyright law for the European Union by joining the traditional copyright laws of its member nations. To further this goal, the EU proposed that four elements be present in the EUCD, including 1) the right to reproduction of copyrighted material, 2) the right of communication to the public, 3) the right of distribution, and 4) the protection of technological measures and rights-management information.<sup>viii</sup> The Commission ensured that "there is an exhaustive list of exceptions to copyright which Member States may maintain provided that copyright holders receive fair compensation for particular exceptions."<sup>ix</sup> Furthermore, the

preamble to the EUCD, paragraph (48)[0], stated that the anti-circumvention provisions are not intended to interfere with cryptography research.

The current text of the EUCD, similar to that of the DMCA, fails to ensure the preservation of fair circumvention for research, academic, and other fair use purposes. Article 6.1 states that it is illegal to circumvent any protection measure on a copyrighted material. Circumvention for the purpose of making a backup of a lawfully obtained DVD is as illegal as disseminating the music on a Peer-to-Peer sharing network. Article 6.2 makes it illegal to create or traffic in any device that circumvents access controls regardless of potential fair use. Moreover, the provisions providing exceptions to anti-circumvention, in Article 5, are vaguely defined and allow for fair use of copyrighted material only at the unfettered discretion of the copyright owner. For example, under one exception, the text allows academics who cannot access a work due to a technological protection measure to appeal to the Secretary of State to obtain access. This exception, however, does not provide for obtaining permission to circumvent the access controls and only allows for permission to obtain access. Thus, under the EUCD, a researcher looking for security flaws could be liable under the EUCD for a fair use of copyrighted material for research purposes.

Instead, the Directive provides that member states must have adequate legal protection against individuals who circumvent digital access controls to copyrighted material if that individual knows or should know that the circumvention constitutes a copyright infringement. The "exhausted" list of exceptions is optional and left to the discretion of the individual governments to adopt.<sup>x</sup> In an attempt to lessen the controversy that might arise from making the list exhaustive, the commission added a "grandfather clause" to allow the state to continue applying existing exceptions found in their copyright laws but only in cases that applied to

analogue and not digital use. Without digital use included in the statute, the majority of future public concern over fair use would not be addressed by the grandfather clause. As cause for added concern, a report submitted to the EU entitled "Proposed Directives Concerning Authors' Rights," argued that under United States law there were too large a number of statutory exceptions to the anti-circumvention provisions.<sup>xi</sup> The report concluded that the EUCD should maintain its over twenty or so exceptions rather than narrowing them and adding a "fair use" clause that would leave the Directive open for legal interpretation. Subsequent drafts of the Article 5 exceptions to liability appear to have been strongly influenced by this report.

Furthermore, the provisions clearly allow for the copyright owner to use encryption technology to prevent illegal copying of their copyrighted materials. In this respect, the text eliminated the traditional balance of rights for users and copyright owners under European Copyright Laws. Exceptions to circumvention of the copyrighted material for fair uses are less clearly worded. While the text of the directive specifically lists some exceptions to anti-circumvention provisions, such as for educational, scientific or library use, these provisions lack a clear protection of fair use by the individual user of legally-obtained copyrighted materials. Specifically, the EUCD limits the exclusive right of reproduction for private and individual use. The ambiguous wording of the provision regarding reproduction rights leaves it to interpretation whether the individual user has the right to make copies of the lawfully obtained copyrighted material for another person.

Unlike the DMCA, the EUCD provides the member states with the option of enacting limitations on the right of reproduction for educational uses, research, reporting current events, criticizing or reviewing the work, for public security, or to benefit individuals with disabilities. Optional or not, the language of the statute contains similar ambiguities concerning fair use

rights as the DMCA. For example, the EUCD provides copyright owners with the exclusive right to all temporary reproductions. The Directive, however, fails to include reproductions that are transient and incidental, which are essential to the digital technological process. In this respect, the EUCD will insight legal battles between copyright owners and individual users over the issue of fair use of copyrighted materials. Thus, the EUCD in its current form leaves too much to be interpreted by the individual member states' legal systems and opens the door to a flood of future litigation.

Article 5(5) of the Directive, the exceptions and limitations provision, states that the exceptions provided for are only applicable in special cases, including those where the use of the copyrighted work or circumvention of access controls to that work would not conflict with the normal exploitation of the work and would not "unreasonably prejudice the legitimate interests of the copyright holder." This final provision provides enormous lead-way for the copyright owners to prohibit fair circumvention of copyright controls. Essentially, the exceptions provision mimics the vague exceptions provisions in the DMCA by promising to uphold fair use rights, but only if the copyright owner approves of them first.

Already, several countries have expressed their intent to extend the exceptions in Article 5 to include fair uses, such as illustration for teaching, or digital copying.<sup>xii</sup> Other countries plan to ensure compliance with prior legislation, including regarding previous contractual provisions, or plan to enhance extended collective licensing. In most countries, however, the lobbying power of the copyright holders appears to have had a stronger influence than fair use proponents on the individual nations' plans to implement the EUCD. For example, in Germany and the United Kingdom, the main economic and political supporters for copyright holders are the publishing companies, while in Denmark, the music industry serves as the strongest lobbying

influence. Thus, individual nations' attempts to broaden the provisions of the EUCD may be overly influenced in favor of the copyright owners' interests. This imbalance of interests similarly occurred in the forming and implementation of the DMCA.

When the bulk of copyright owners who are left to make the decision to approve or reject fair uses of the copyrighted material are the economically powerful movie and music industries, one can be assured that their interpretations of Article 5(5) will not permit fair circumvention of access controls. Furthermore, as technology continues on the current trend of making books, music and movies copy-protected, any individual user's fair use of a lawfully obtained copyrighted material will be whittled away to nothing. In addition, any attempts to create future fair uses of those materials will be stifled by the fear of liability under the EUCD. This will upset the balance of rights for both the user and the copyright owner that is found in most nations' copyright laws.

### **III. Circumventing Access Controls and Trafficking in Circumvention Devices: Two Methods of Increasing the Spread of Innovation in Digital Technology**

Two of the most significant mechanisms for the spread of innovative technologies are the ability of programmers to circumvent access controls and traffic in circumvention devices. The EUCD, in following the example of the DMCA, has the potential to restrict or significantly limit the ability of the individual user to take part in either method. The primary arguments asserted against the individual user's right to circumvent access controls and to traffic in circumvention devices have been 1) that such devices allow the user to digitally pirate copyrighted material, and 2) it deprives the copyright owner of profits by making the digital material illegally available.

Legislative history of the DMCA indicates that Congress did not have the primary objective of regulating the spread of technological information and ideas when they focused the

provisions of the DMCA on the copyright owners' interests in discouraging digital piracy. The DMCA was created under the WIPO directive to encourage the growth of electronic commerce while maintaining the rights of copyright owners.<sup>xiii</sup> Even as early as 1997, however, copyright law scholars began to realize that the DMCA would restrict fair usage of copyright works in the digital media, in effect creating a form of "paracopyright" that would only apply to digital technology.<sup>xiv</sup> Despite the protests of concerned legal scholars, the U.S. Congress responded by emphasizing how technological changes have increased the threat of copyright infringement and by writing provisions into the DMCA that excluded fair use of copyrighted materials by individual users. It is this form of imbalance, or "paracopyright," that the EU CD must avoid.

A. What the EU Can Expect: The Chilling Effect on the Spread of Technology

The EU CD, without amendments providing for fair circumvention, will evoke the same chilling effect on the spread of technology research and development as the DMCA. The DMCA has already had a negative international effect, even in countries that are no signatories of the WIPO Copyright Treaty. Because the applicability of the DMCA is not restricted to American citizens, international visitors to the United States can be subject to liability under the statute. Therefore, the threat of liability under the anti-circumvention provisions alone discourages the spread of technological research to America.

The first and most well-known court interpretation of DMCA involved a Russian citizen, Dmitri Sklyarov, who had committed acts in violation of the DMCA while in his home country and working for his employer, Elcomsoft.<sup>xv</sup> When he brought his research to the United States, he was criminally prosecuted under the DMCA for the creation and distribution of the Advanced eBook Processor, a decryption device used to convert Adobe eBooks into a .pdf format. Beginning with the arrest and detainment of Sklyarov for presenting his decryption research at a

lecture in Las Vegas, the DMCA has continued to have a cascading chilling effect internationally on the spread of technology to the United States. Programmers, internet publishers and distributors of software, avoid the reach of the DMCA by not stepping foot in America.

Another example of this chilling effect is the refusal of Dutch cryptography expert, Niels Ferguson, to publish his research.<sup>xvi</sup> Ferguson fears that he will face liability under the DMCA by revealing a major flaw in Intel's encryption plan for firewall connections, called the High-Bandwidth Digital Content Protection System. While many would potentially benefit from the knowledge of this security flaw, Ferguson cannot afford as an individual to be subjected to the same fate as Sklyarov just for presenting his research even though his work contains a useful contribution to security technology. Other programmers and researchers have made similar conclusions in fear of the DMCA.<sup>xvii</sup> Similarly, if the EUCD implements similar, ambiguously-worded anti-circumvention and anti-trafficking provisions, member nations can expect the same chilling effect to occur in their respective nations.

This chilling effect on the spread of technological information caused by the EUCD will take place not only on foreign nationals but also domestically in each member state. The case of Dr. Edward Felten and his colleagues provides the best example of how anti-circumvention provisions have negatively affected the academic community.<sup>xviii</sup> The Secure Digital Music Initiative Foundation (SDMI) offered a challenge to the cryptography researchers and hackers to break several proposed copyright control measures created by SDMI. The foundation licensed samples of the proposed technology for a limited time to participants and offered \$10,000 to successful researchers for their results. Rather than accepting the \$10,000, Felten and his colleagues chose to retain their rights to their research as provided for in the license agreement. Before the research was presented at an academic conference, SDMI sent a cease and desist letter

to Felton requiring him to bring an action for declaratory judgment enabling them to publish their research.

In another well-publicized case, *Universal City Studios v. Reimerdes*, 2001 U.S. Dist. LEXIS 12548 (SDNY 2001), 2600 magazine, an online publication, was brought to court under the DMCA by eight major motion picture associations. 2600 magazine had published DeCSS software program on its website. The DeCSS program circumvents encryption used on DVD movies. The program was originally created to allow for interoperability of programs to allow users of the Linux operating systems to be able to view their legally obtained copies of DVD movies. 2600 magazine did not develop the software, nor did they use it for any copyright infringement activities. Under the DMCA, however, they were accused of trafficking in a circumvention device by posting access to the software on their website.

In response to the decision in *Universal City Studios*, other well-known programmers have pulled their research and software programs from their websites. For example, Dug Song, a network security protection expert, removed his security research papers from his website for fear of being liable under the DMCA. Song's research discovers and points out common flaws in network security systems and firewalls. While this once available research is invaluable to the continued development of Internet security and privacy, it has been made inaccessible and discouraged under the anti-circumvention and anti-trafficking provisions of the DMCA.

As exhibited by these cases, the threatening of academic research and protected free speech rights caused by the DMCA has had a serious impact on the academic and scientific community both in America and abroad.<sup>xix</sup> Foreign researchers who refuse to visit the United States or share their research with the American scientific community because of the DMCA will be forced to turn to other countries outside the EU member nations in order to escape the

potential liability that their work requires. If the EUCD is not amended to include a fair circumvention and fair trafficking provision, the nations of the EU will essentially push their technology researchers and programmers out of the country and discourage the spread of technology domestically and internationally. This intellectual drain could have serious ramifications on the ability of digital technology to develop at the fast pace that it has in the past decade.

While the EUCD's anti-circumvention provisions were written to discourage piracy of digital copyrighted material, the DMCA has shown that these provisions will be used against scientists, academics and individual consumers who are entitled to make valid fair uses of the material. Legitimate fair use activities will become illegal under the Directive. This leaves the question of how digital technology will continue to develop and spread internationally given the constraints of the EUCD on the European continent.

#### **IV. Learning the DMCA Lesson: Proposed Solutions for the EUCD**

In an effort to maintain the balance of traditional European copyright law in the EUCD, the EU must be amended to strike a balance between the interests of both the copyright owner and the individual user. If the EUCD fails in this respect, the member nations of the EU can expect similar controversy and litigation to arise in the interpretation of the directive. As a result of this potential litigation, EU governments will likely experience a backlash from the technology community that may result in the physical retreat of programmers and digital technology developers and an overall slower growth of digital technology research and development among European nations. There are two possible approaches for amending the EUCD to provide for fair circumvention of access controls: 1) following Japan's example of

compliance with Article 11, or 2) amending Article 6 to include fair circumvention for fair use purposes similar to amendments proposed for the DMCA.

#### A. Japanese Compliance with Article 11

In compliance with Article 11 of the WIPO Copyright Treaty, Japan's digital copyright statute strikes a balance between the rights of the copyright owner with the rights of individual users. The statute defines digital access controls broadly, including "measures to prevent or deter such acts as constitute infringements on moral rights or copyright...or neighboring rights."<sup>xx</sup> Unlike the DMCA, Japan's statute does not broadly prohibit the circumvention of access controls. Instead, the statute allows for encryption research and the circumvention of access controls necessary for this research. While the researchers are prohibited from distributing the circumvention devices, they are permitted to disseminate the results of their research, and are only found liable for copyright infringement if it can be proven that there was a tangible circumvention measure taken.<sup>xxi</sup> In other words, if the access control device being used were a 42-bit encryption<sup>xxii</sup> device meant to prevent the fair use of the copyrighted material by an individual user, that access control could be circumvented by the researcher who needs access to the material for fair use purposes, such as interoperability or fixing security flaws in the program.

Similar to American programmers' protests against the DMCA, users in Japan argue that the statute is too restrictive and that cryptography researchers should be allowed to disseminate the results of their research in source code, as it is the best method of exhibiting the research. While the inability to disseminate digital research on circumvention remains the largest flaw in their statute, in comparison with the DMCA, the text of Japan's statute more successfully provides for the growth of technological innovation while protecting the copyright owner's rights.

As a compromise, Japan's statute allows for fair circumvention while restricting dissemination of circumvention devices or research. A similar amendment could be made to the EUCD to provide for fair circumvention. Furthermore, the text of the EUCD could go a step further than the Japanese example and could include a provision that specifically allows researchers to disseminate the results of their research. This would be a significant improvement on the catch-all phrase in Article 5(5) of the EUCD providing for the unfettered discretion of the copyright owners to restrict fair use. Such an amendment to Article 5's exceptions or the creation of a fair circumvention provision in Article 6 would ensure researchers that they would not be found liable for circumventing access controls if those access controls were preventing a fair use of the copyrighted material.<sup>xxiii</sup>

B. Following the Digital Media Consumers' Rights Act's (DMCRA) Proposed Amendments

As a result of the controversies raised by the DMCA, Representatives Rick Boucher and John Doolittle have proposed new legislation that would provide much needed changes to the DMCA.<sup>xxiv</sup> The DMCRA, or H.R. 5544, would amend Subsection (a) of section 1201(a)(2) and (b)(1) to allow for activities that would be "solely in furtherance of scientific research into technological protections measures." This would allow researchers, such as Felten, to circumvent access controls for the purpose of finding security flaws or developing new technological protection measures. In addition, the DMCRA would amend DMCA section 1201(c)(1) to state that a person is not in violation of section 1201 if he or she circumvents a technological measure in the process of accessing or using a copyrighted material. Under this amendment, the individual user who lawfully obtains a copyrighted material can circumvent the access controls on that work for his or her purposes. Violations of section 1201 would only

occur when the user distributed the copy over the Internet to other users. Thus, liability only occurs when the circumvention results in a copyright infringement.

Furthermore, the DMCRA would amend section 1201(c) by adding a new provision providing that a user can manufacture, distribute or make any non-infringing use of a product that has the ability to enable significant non-infringing use of a copyrighted material. Under this addition, individual users would be ensured access to hardware or software products that would allow them to develop fair uses of the copyrighted material. For example, the user could legally create a software program to convert his or her electronic book into audio format for personal use.

The amendments proposed in the DMCRA could similarly be added to the EU CD. Article 5(5) could be amended to broaden the exceptions to liability, including allowing for all activities for scientific research for technological protection measures. Article 6 could be amended to include a fair circumvention provision where liability would only occur when it could be proven that the circumvention resulted in a copyright infringement. Because the text of the EU CD so closely resembles the DMCA's anti-circumvention provisions, the EU should take into consideration the consequences and controversies of the DMCA in America that have led to the need for this amendment's proposal. The text of the EU CD should reflect these concerns and address the issue of fair circumvention before the member nations are required to implement the Directive into their national copyright laws.

## **V. Conclusion**

The DMCA has shown that legislation focusing strictly on protecting access controls for digital copyrighted materials creates a chilling effect on the academic and intellectual community. The lack of fair circumvention provisions to ensure fair use rights inhibits the

progress of technology and the spread of ideas internationally. In this respect, the DMCA has protected copyright owners at the expense of the rights of individual users' and researchers' rights to fair use of the material. The EU must learn from the controversies raised by the DMCA and amend the EU CD accordingly to provide for fair circumvention either through amendments to Articles 5 and 6 or by creating a new provision specifically addressing fair use. If the balance of copyright rights is not restored in the text of the Directive before member states are expected to implement it, the EU will incur the same harsh consequences on their academic and research community that have occurred under the DMCA in the United States.

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<sup>i</sup> WIPO Copyright Treaty, Dec. 20, 1996. Specifically, Article 11 of the treaty dictates that each signatory nation create and enact legislation that "provide[s] 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. Art. 11.

<sup>ii</sup> 17 U.S.C.A. § 1201 (2002).

<sup>iii</sup> See Sharonda Williams, "The Digital Millennium Copyright Act and the European Copyright Directive: Legislative Attempts to Control Digital Music Distribution," 3 *Loy. Intell. Prop. & High Tech. J.* 35 (Summer, 2001).

<sup>iv</sup> 17 U.S.C. § 107 (2002). Section 107 of the U.S. Copyright Statute provides the following factors to determine if a fair use exists: 1. the purpose and character of the use, including whether such use is of commercial nature or is for nonprofit educational purposes; 2. the nature of the copyrighted work; 3. 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.

<sup>v</sup> "EFF White Paper: Three Years under the DMCA," <[http://www.eff.org/IP/DMCA/20020503\\_dmca\\_consequences.html](http://www.eff.org/IP/DMCA/20020503_dmca_consequences.html)> (accessed Nov. 19, 2002).

<sup>vi</sup> Tyler G. Newby, "What's Fair Here is Not Fair Everywhere: Does the American Fair Use Doctrine Violate International Copyright Law?," 51 *Stan. L. Rev.* 1633, (July 1999).

<sup>vii</sup> "Digital copyright clampdown to jump the Atlantic," *Silicon.com*, <<http://www.silicon.com/public/door?REQUNIQ=1004218894&60004REQEVEN=&RE...>> (last updated Oct. 26, 2001) (quoting Thomas Vinje, European copyright law expert, "The legislative progress was dominated by the big rights holders and their well-paid lobbyists, and EU legislators were led around by their noses. I don't think they realized what they were passing.")

<sup>viii</sup> See Commission Proposal for a European Parliament and Council Directive on the Harmonization of Certain Aspects of Copyright and Related Rights in the Information Society, 1998 O.J. (C 108).

<sup>ix</sup> "Commission welcomes Council agreement on a Directive on copyright in the information society," <[http://europa.eu.int/comm/internal\\_market/en/intprop/news/601.htm](http://europa.eu.int/comm/internal_market/en/intprop/news/601.htm)> (accessed Nov. 20, 2002).

<sup>x</sup> *Id.*

<sup>xi</sup> "Proposed Directives Concerning Authors' Rights," a presentation to the Commission, <<http://europa.eu.int/ISPO/eif/InternetPoliciesSite/LAB/Copyrightreport.html>> (accessed Nov. 20, 2002).

<sup>xii</sup> Teresa Hackett, "The European copyright Directive - the last chapter, EBLIDA workshop on the national implementation of the EU copyright Directive," 1 February 2002, <[http://www.eblida.org/eblida/meetings/events/copyright/workshop\\_feb02.htm](http://www.eblida.org/eblida/meetings/events/copyright/workshop_feb02.htm)> (accessed Nov. 18, 2002).

<sup>xiii</sup> H. Commerce Comm. Rpt., 105<sup>th</sup> Cong., 2<sup>nd</sup> Session, 105-551 (II) at § 38 (1976).

<sup>xiv</sup> *Id.* at § 39.

<sup>xv</sup> *U.S. v. Elcom, Ltd.*, 203 F. Supp. 2d 1111 (May 8, 2002).

<sup>xvi</sup> See Niels Ferguson, *Censorship in Action: Why I Don't Publish My HDCP Results*, <<http://www.macfergus>

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.com/niels/dmca/cia.html> (Aug. 15, 2001) (accessed Nov. 2, 2002)

<sup>xvii</sup> See Brian McWilliams, Security Expert's DMCA Protest Rallies Supporters, Wash. Post (Sept. 6, 2001), <<http://www.newsbytes.com/news/01/169829.html>> (accessed Nov. 2, 2002) (citing to Dug Song's refusal to keep his cryptography information on his website for fear of the DMCA).

<sup>xviii</sup> Pamela Samuelson, "Anticircumvention Rules: Threat to Science," 293 Science 2028, Sept. 14, 2001 <<http://www.sciencemag.org/cgi/reprint/293/5537/2028>> (accessed Oct. 16, 2002); Letter from SDMI general counsel to Prof. Edward Felten, April 9, 2001 <<http://cyptome.org/sdmi-attack.htm>> (accessed Oct. 16, 2002).

<sup>xix</sup> Julie Cohen, "Call it the Digital Millennium Censorship Act – Unfair Use," The New Republic, May 23, 2000, <<http://www.thenewrepublic.com/cyberspace/cohen052300.html>> (accessed Nov. 11, 2002) (stating that "[a] publisher can prohibit fair-use commentary simply by implementing access and disclosure restrictions that bind the entire public. Anyone who discloses the information, or even tells others how to get it, is a felon.").

<sup>xx</sup> See Japanese Copyright Law, Law No. 101 of 1998, art 2(1)(xx), available at [http://clea.wipo.int/lpbin/lpbin/lpext.dll/clea/LipEN/25b4b/2709b?f=file\[document.htm\]](http://clea.wipo.int/lpbin/lpbin/lpext.dll/clea/LipEN/25b4b/2709b?f=file[document.htm]) (accessed Nov. 2, 2002).

<sup>xxi</sup> See Japanese Copyright Law, Law No. 101 of 1998, art. 120bis (ii).

<sup>xxii</sup> Another theory presented argues that because 42-bit encryption can easily be circumvented, any copyright owner that uses this type of low-level security cannot realistically expect completely secure protection of the copyrighted material. Therefore, the encryption of the copyrighted material cannot be viewed as an effective access-control device at the outset.

<sup>xxiii</sup> Traditional contributory liability laws in individual nation states might be also enough to protect copyright holders rather than the overly broad EUCD provisions that eradicate many fair circumvention exceptions. See *Sony v. Universal City Studios, Inc.*, 464 U.S. 417, 425-27 (1984)(holding that there was no liability for the manufacturer of video tape records because the machines could be used for both infringing and non-infringing purposes); see also *A&M Records, Inc. v. Napster, Inc.*, 239 F.3d 1004, 1020-21 (9<sup>th</sup> Cir. 2001)(finding liability for the company providing software to distribute and store digital audio files for its users because the company had "actual knowledge" that infringing activity was taking place with its software).

<sup>xxiv</sup> "Digital Media Consumers' Rights Act Section-by-Section Description," <<http://www.house.gov/boucher/docs/dmcrasec.htm>> (accessed Nov. 21, 2002).