The Digital Millennium Copyright Act: Anticircumvention Ban Gives More Rights to Copyright Owners

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I. INTRODUCTION

Digital-based technology permeates today’s world. While the level of technological usage in our society is not equal to that of “The Jetsons,” people rely on various machines and gadgets for convenience and entertainment value. As technology has evolved, people have moved from fireplaces to stoves to microwaves, from scribes to typewriters to computers, and from oral history to libraries to the Internet. As a result of society’s acceptance and use of new and improved technological devices, producers of goods and services have responded by continuously developing up-to-date products that meet society’s demand for technological innovation. Today, people use technology for purposes ranging from “burning” CDs, to shopping on the Internet, to receiving e-mail on cellular phones.

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2. “Burning” is a term used to describe the process and activity of transferring information to a blank CD.
People also use technology as a means of entertainment and as a way of escaping from the stressful, high-paced world. Technological innovations have assured that this “pursuit of happiness” can easily be obtained. As an example, first there was the radio, and then TV. Eventually movies came along in theaters and now Blockbuster Video is a household name. All of this occurred because suppliers made consumer entertainment items more readily available. The authors of these inventions and innovations might not have created these works without the guarantee of protection and compensation for their works. The underlying basis of all entertainment items, whether they are books, movies, or songs, is the expression of ideas.

To ensure that these expressions are made available to the public, copyright laws were included in the laws of the United States. Copyright laws protect “original works of authorship fixed in any tangible medium of expression, now known or later developed, from which they can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device.” Some examples of works protected by copyright laws are books, games, movies, and music. As technology evolves and makes these forms of expression more readily accessible to the public through various mediums, the laws must change to adapt to these new developments.

The new medium of expression for copyrighted works is the digital format. Examples of digitally formatted works are CDs, DVDs, and e-books. To respond to these changes in technology, copyright laws around the world needed to be updated. In 1996, 150 countries met under the guidance of the World Intellectual Property Organization (WIPO) and created two treaties that deal with the protection of digital works. To implement these treaties, Congress created the Digital Millennium Copyright Act (DMCA).

The DMCA makes a major change to pre-existing copyright law by declaring unlawful any act designed to circumvent technological protections used by copyright owners to protect their work when contained in a digital format. The intent of Congress was to maintain the balance between copyright owners and users of copyrighted works.

5. See id. The House adopted H.R. 2281 and the Senate adopted S.2037. Both the House and Senate worked to create the Act that is codified in the 1200s of 17 U.S.C. The DMCA was finally enacted in October 1998.
with respect to the digital environment. However, based on the wording of the provisions and the technological evolution, Congress may have tilted the scales by giving copyright owners more rights than they enjoyed in the past, thus negating the balance they sought to maintain.

II. THE DIGITAL MILLENNIUM COPYRIGHT ACT

The new digital age allows users of electronic media to send and receive copyrighted materials around the world instantaneously. In response, representatives from many countries gathered in Geneva, Switzerland, in 1996 under the leadership of WIPO to negotiate treaties for the protection of copyrighted material in the new digital environment and to protect international authors of copyrighted material. The meeting produced two treaties, the “WIPO Copyright Treaty” and the “WIPO Performance and Phonograms Treaty.” As a signing member, the United States is under an obligation to implement the treaties within U.S. law.

The treaties do not require a substantive change in U.S. law; instead two technological adjuncts were added to the U.S. copyright law. To comply with these treaties Congress enacted the DMCA, which amends existing U.S. copyright law. The most significant change is the addition of a new statute, which renders the circumvention of technological protective measures to copyrights illegal.

A. Background: The Purpose for Enactment

The DMCA was one of the most important pieces of legislation that the 105th Congress considered. Electronic commerce is a growing marketplace where copyrighted goods can be bought and sold. However, due to the ease with which digital works can be copied and distributed around the world, copyright owners will

9. See id.
10. See id.
11. See id.
12. See id. pt. 2, at 32.
15. By 2002 the economic activity of electronic commerce will range from $200 billion to $500 billion compared to $2.6 billion in 1996. See id.
hesitate to make their works available unless they are assured they will be protected.  

“When copyrighted material is adequately protected . . . a plethora of works will be distributed.” In order to protect their works, copyright owners will most likely encrypt or scramble their works, then make copies available to consumers who have paid for access. As a result, others will attempt to decrypt or descramble the codes protecting the copyrighted work in order to gain access or to permit others to do so. Therefore, Congress recognized that the “digital environment poses a unique threat to the rights of copyright owners,” which “necessitates protection against devices that undermine copyright interests.”

To protect copyright owners from piracy a line must be drawn between legitimate and nonlegitimate uses. However, that line is not easy to define. The DMCA attempts to define the line by creating a compromise “preventing only the manufacture or sale of devices that: (1) are ‘primarily designed’ to grant free, unauthorized access to copyrighted works; (2) have only limited commercially significant purpose or use other than to grant such free access; or (3) are intentionally marked for use in granting such free access.”

This law establishes a wide range of rules that govern “not only copyright owners in the marketplace for electronic commerce, but also consumers, manufacturers, distributors, libraries, educators, and online service providers.” “[M]any of these rules may determine the extent to which electronic commerce realizes its potential.” Essentially, Congress hopes this law will “protect copyright owners, and simultaneously allow the development of technology.”

B. Anticircumvention Ban

The heart of the DMCA is the anticircumvention ban. It will enforce copyright owners’ use of “technological protection measures with legal sanctions for circumvention and for producing and distributing products or providing services that are aimed at

18. See id.
19. See id.
20. Id. pt. 2, at 25.
22. Id.
23. See id. pt. 2, at 22.
24. Id.
25. See id. pt. 1, at 18.
circumventing technological protection measures that effectively protect copyrighted works."\textsuperscript{26} This has been added as a free-standing provision under the Code rather than being tacked on as an addition to an already existing provision.\textsuperscript{27} It can be found under § 1201 of the U.S. Code.\textsuperscript{28}

Section 1201(a)(1)(A) states that “no person shall circumvent a technological measure that effectively controls access to a work protected under this title.”\textsuperscript{29} This is the general prohibition that governs the entire provision.\textsuperscript{30} The subsequent subsections supplement this prohibition and give it its teeth.

Section 1201(a)(2) is “designed to protect access to a copyrighted work” by prohibiting “devices primarily designed to circumvent effective technological measures that limit access to a work.”\textsuperscript{31} Specifically, § 1201(a)(2) states:

No person shall manufacture, import, offer to the public, provide, or otherwise traffic in any technology, product, service, device, component, or part thereof, that

(A) is primarily designed or produced for the purpose of circumventing a technological measure that effectively controls access to a work protected under this title;

(B) has only limited commercially significant purpose or use other than to circumvent a technological measure that effectively controls access to a work protected under this title; or

(C) is marketed by that person or another acting in concert with that person with that person’s knowledge for use in circumventing a technological measure that effectively controls access to a work protected under this title.\textsuperscript{32}

To augment this subsection, definitions of the terms were included in § 1201(a)(3). “Circumvent a technological measure” is the “means to descramble a scrambled work, to decrypt an encrypted work, or otherwise to avoid, bypass, remove, deactivate, or impair a technological measure, without the authority of the copyright owner.”\textsuperscript{33} This section also includes the definition of “effectively controls access to a work,” which means if the “measure, in the

\textsuperscript{26} S. REP. NO. 105-190, at 11 (1998).
\textsuperscript{29} See id. § 1201 (a)(1)(A).
\textsuperscript{30} See S. REP. NO. 105-190, at 28 (1998).
\textsuperscript{31} See id. at 12.
\textsuperscript{33} Id. § 1201(a)(3)(A).
ordinary course of its 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."\(^{34}\) Congress has interpreted this phrase to mean any measure “based on encryption, scrambling, authentication, or some other measure which requires the use of a key provided by a copyright owner to gain access to a work.”\(^{35}\) Specifically, this section was designed to outlaw “black boxes” that were “expressly intended to facilitate circumvention of technological protection measures for purposes of gaining access to a work,”\(^{36}\) not legitimate devices that can continue to be sold.\(^{37}\) It is this provision that protects copyright owners themselves.\(^{38}\)

Section 1201(b) is the other subsection that gives weight to the general prohibition against circumvention technology. This subsection is “designed to protect the traditional copyright rights of the copyright owner.”\(^{39}\) Section 1201(b)(1) states:

No person shall manufacture, import, offer to the public, provide, or otherwise traffic in any technology, product, service, device, component, or part thereof, that

(A) is primarily designed or produced for the purpose of circumventing protection afforded by a technological measure that effectively protects a right of a copyright owner under this title in a work or a portion thereof;

(B) has only limited commercially significant purpose or use other than to circumvent protection afforded by a technological measure that effectively protects a right of a copyright owner under this title in a work or a portion thereof; or

(C) is marketed by that person or another acting in concert with that person with that person’s knowledge for use in circumventing protection afforded by a technological measure that effectively protects a right of a copyright owner under this title in a work or a portion thereof.\(^{40}\)

Definitions for key phrases are provided in § 1201(b)(2). To “circumvent protection afforded by a technological measure” means “avoiding, bypassing, removing, deactivating, or otherwise impairing a technological measure.”\(^{41}\) The other phrase defined is “effectively

\(^{34}\) Id. § 1201(a)(3)(B).


\(^{36}\) See id. pt. 2, at 38.


\(^{38}\) See id. at 29.

\(^{39}\) See id. at 12.


\(^{41}\) Id. § 1201(b)(2).
protects a right of a copyright owner under this title,” which means that “if the measure, in the ordinary course of its operation, prevents, restricts, or otherwise limits the exercise of a right a copyright owner under this title.”\textsuperscript{42} Again, Congress deems the latter phrase to also mean those works protected by “encryption, scrambling, authentication, or some other measure which requires the use of a “key” provided by a copyright owner to gain access to a work.”\textsuperscript{43}

Section 1201(b) is utilized when someone has obtained authorized access to a copy of the work, but the copyright owner has placed a technological measure on the work, which effectively protects their right under the Copyright Act to control or limit the use of the copyrighted work by another party.\textsuperscript{44} Even though § 1201(a)(1) and § 1201(b) sound similar and both are banning circumvention technology, § 1201(a)(1) prohibits the conduct of circumvention, which was never illegal before this act, and § 1201(b) continues to enforce the longstanding ban on copyright infringement.\textsuperscript{45} Therefore, as these subsections are not interchangeable, a violation of one provision may not violate the other. However, the act of circumventing a technological protective measure will itself be a violation of the statute giving greater protection to copyright owners.

C. The Exceptions

Congress was concerned that the statute would have adverse effects on legitimate uses of copyrighted material, so it added extra provisions that established clarifications and exceptions to § 1201(a)(2) and § 1201(b).\textsuperscript{46}

The main clarification concerned the “fair use” doctrine. Fair use may be made of a copyrighted work without infringing the author’s rights if the work is used for purposes such as “criticism, comment, news reporting, teaching, comment, or research.”\textsuperscript{47} Congress received input from many private and public interest groups who were worried that § 1201 would undermine Congress’s time-honored commitment to the fair use doctrine.\textsuperscript{48} In response, Congress endeavored to ensure that the anticircumvention ban would maintain the balance between the interests of the authors and the information

\begin{itemize}
\item \textsuperscript{42} Id.
\item \textsuperscript{43} H.R. REP. NO. 105-551, pt. 2, at 40 (1998).
\item \textsuperscript{44} See id. pt. 1, at 19.
\item \textsuperscript{45} See S. REP. NO. 105-190, at 12 (1998) (emphasis added).
\item \textsuperscript{46} See H.R. REP. NO. 105-551, pts. 1 & 2 (1998); see also S. REP. NO. 105-190 (1998).
\item \textsuperscript{47} See 17 U.S.C. § 107 (1976).
\end{itemize}
users. To further clarify its position, Congress added a provision that states nothing within § 1201 will effect any “rights, remedies, limitations, or defenses to copyright infringement, including fair use” under Title XVII. Therefore, Congress has attempted to uphold the doctrine of fair use in the anticircumvention ban.

Within § 1201 there are exemptions that apply to certain groups if specified criteria are met. One exemption is subsection (e), which creates an exception for lawfully conducted investigative, protective, or intelligence activities by an officer, agent, or employee of the United States or an individual state. For example, protective material can be used to prevent minors from accessing adult sites while on the Internet. Congress also added a provision that enables consumers to protect their personal privacy from systems that try to catch their personal information while they are online.

An exemption for nonprofit libraries, archives, and educational institutions was also included in the statute by Congress. The exception is limited and only allows one of the institutions to obtain a copyrighted work for the “sole purpose of making a good faith determination as to whether it wishes to acquire a copy, or portion of a copy, of that work.” This exemption only applies if one of the institutions cannot obtain the work by any other means and did not do so for financial gain or commercial advantage. The main point of interest is that this subsection cannot be used as a defense to a claim brought under § 1201(a)(2) or (b) or permit an institution to “manufacture, import, offer to the public, provide, or otherwise traffic in any technology, product, service, component, or part thereof, which circumvents a technological measure.”

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49. See id. at 25.
51. See id. § 1201(e).
52. See id. § 1201(h). Congress was concerned that the statute might make it unlawful for parents to protect their children from pornography and other harmful material on the Internet by preventing access to adult Web pages. Congress included this provision to ensure there would not be any inadvertent legal consequences for manufacturers who design products for parents to protect their children from these sites. See H.R. Rep. No. 105-551, pt. 2, at 45 (1998).
53. See 17 U.S.C. § 1201(i) (1998). This is only allowed if the copyright owner’s protective measure contains any personal data gathering capabilities. If it does, the consumer can legally circumvent the protective measures. On the other hand, if the copyright owner conspicuously states that his protective measure does not have this capability, it is illegal for a consumer to circumvent the protective measure for any reason. See H.R. Rep. No. 105-551, pt. 2, at 45 (1998).
56. See id. at 42.
Two additional exceptions were provided to enable technological research. The first is the reverse engineering subsection. Section 1201(f) promotes reverse engineering by permitting the circumvention of access control technologies for the sole purpose of achieving software interoperability. The copy of the computer program must be lawfully acquired, along with any passwords, codes, etc., that may be needed, and the acts must be limited to those elements that will achieve interoperability between programs. Section 1201(f)(3) allows developers of software to use the help of third parties to help identify or create the necessary information to achieve interoperability. If a person uses this information for any purpose other than to achieve interoperability between systems, it is a violation of the act. Also, as the provision requires that the program be lawfully acquired, it is assumed that computer hackers cannot use this subsection as a defense to a violation of § 1201(a)(2) or (b).

The other “scientific” provision is the exemption for encryption research. This provision was added because Congress perceives encryption research to be “critical to the growth and vibrancy of electronic commerce.” It is not a violation of § 1201(a)(2) or (b) to develop means to circumvent technological protective measures for the sole purpose of performing acts of good faith encryption research, as defined in § 1201(g)(1)(a). Additionally, a person may acquire the services of a second person to verify the results achieved in the encryption research. However, the copyright owner’s permission is needed in order to engage in encryption research, meaning that a computer hacker could not use this subsection as a defense for violation of § 1201(a)(2) or (b) because the hacker is usually operating without the authorization of the copyright owner.

58. See id. § 1201(f)(1).
60. See id. at 43.
61. See id.
62. See id.
63. See id. at 44.
64. 17 U.S.C. § 1201(1)(a) defines “encryption research” as the activities necessary to identify and analyze flaws and vulnerabilities of encryption technologies applied to copyrighted works, if these activities are conducted to advance the state of knowledge in the field of encryption technology or to assist in the development of encryption products.
66. See id.
III. THE DMCA MAY TILT THE BALANCE FOR THE COPYRIGHT OWNER

The digital age is here to stay and daily more people are relying on new and improved forms of technology. Ideas must be protected under the new forms as they were under the old. To meet this new state of affairs, Congress attempted to implement the WIPO Treaties by maintaining the balance between copyright owners and users of information it had upheld in the past.

Congress acted correctly by implementing the DMCA. The Act will allay the concerns of the international community and regulate the violations that may arise within the Internet and electronic commerce environments. Additionally, Congress wanted to maintain the status quo of the fair use doctrine. However, after examining the doctrine and its exemptions, the DMCA's anticircumvention ban narrows the fair use doctrine, tilting the balance in favor of the copyright owners.

A. Case Studies

With the development of the digital age and the ease with which copies of digital works can be made, copyright owners who put their works in digital format often place a technological protective measure within their works. Since Congress recognizes encryption, scrambling, authentication, or some other measure requiring a “key” to access the work, copyright owners will use one of these forms as a protective measure. Now that the DMCA has been passed into law, copyright owners can bring suits against those who circumvented the protective measures within the copyright owner’s product. As this ban was only passed two years ago, there has not been much case law, but what there is can make a great impact on the pre-existing balance in copyright law.

1. RealNetworks, Inc. v. Streambox, Inc.

One of the first cases that applied the anticircumvention ban of the DMCA was RealNetworks, Inc. v. Streambox, Inc. In this case, RealNetworks brought a suit against Streambox for distributing and marketing products known as the VCR, Ripper, and Ferret in violation of DMCA’s § 1201. RealNetworks develops and markets software

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68. See id. at 40.
70. See id. at *1.
products that enable owners of audio and video works to make their content available for consumers over the Internet to view or listen to, while securing the content against unauthorized access or copying.71 Two technological protective measures were employed by RealNetworks to protect its software.72

The first measure is the “Secret Handshake,” which is an authentication sequence only RealServers and RealPlayers know.73 Until the authentication sequence takes place, the RealServer does not stream the content.74 The second measure is the “Copy Switch,” which is a piece of data contained in RealMedia files that contain the owner’s preference as to whether the stream clip can be copied by consumers on their personal computers.75 If a content owner switches on the Copy Switch, consumers can copy that file to their computer.76 Conversely, if the Copy Switch is turned off, the consumer cannot copy the file, as it “evaporates” once it is listened to.77 These protective measures ensure copyright owners a means of protecting their digital works against unauthorized duplication and distribution when a consumer listens a file.78

Streambox developed three products to circumvent RealNetworks’ protective measures. The first is the VCR, which mimics a RealPlayer and circumvents the Secret Handshake, or authentication procedure, allowing consumers to download RealMedia files on to their computers even if the Copy Switch has been turned off.79 Second is the Ripper, which is a “file conversion application that allows conversion (adaptation) of files from RealMedia format to other formats such as .WAV, .RMA, and MP3”; conversions between these forms are also possible.80 Lastly, the Ferret is a plug-in application to the RealPlayer, which allows the user to switch between the Snap search engine (operated by

71. See id. at *1-*2.
72. See id. at *2.
73. See id. RealServer and RealPlayer are the software programs created by RealNetworks to protect a copyright owner’s work from being copied when consumers access it on the Internet. See id.
74. See id. “Streaming” is the manner in which an audio or video clip is sent to a consumer’s personal computer. No trace of the clip is left on the consumer’s computer unless the content owner has permitted the consumer to download the file. See id. at *1.
75. See id. at *2. RealMedia is another software program created by RealNetworks. See id.
76. See id.
77. See id.
78. See id. at *3.
79. See id. at *4.
80. See id. at *5.
RealNetworks) and the Streambox search engine.\textsuperscript{81} Once unauthorized digital copies are created from the use of one of Streambox’s products, the copy can be redistributed to anyone over the Internet.\textsuperscript{82}

To determine if a violation occurred, the court examined both RealNetworks’ and Streambox’s products under the provisions of the anticircumvention ban in 17 U.S.C. § 1201.\textsuperscript{83} First, the court declared that the Secret Handshake constituted a “technological measure” that “effectively controls access” to copyrighted works under 17 U.S.C. § 1201(a)(3)(B).\textsuperscript{84} Conjunctively, the court also declared that the Copy Switch was a “technological measure” that effectively protects the right of a copyright owner to control the unauthorized copying of its work under 17 U.S.C. § 1201 (b)(2)(B).\textsuperscript{85} As it was established that RealNetworks’ products were technological protective measures, it had to be determined whether or not Streambox’s products were a violation of the anticircumvention ban.

Streambox violates the DMCA if its products or a part thereof (1) is primarily designed to circumvent protective measures, (2) has only limited commercially significant purposes beyond the circumvention, or (3) is marketed as a means of circumvention.\textsuperscript{86} The criteria are disjunctive; a product only has to meet one of the three autonomous bases for liability to result.\textsuperscript{87}

Based on the above criteria, the use of the VCR is illegal because it circumvents the secret handshake and copy switch to “obtain and redistribute perfect digital copies of audio and video files that copyright owners have made clear they do not want copied.”\textsuperscript{88} Second, the Ferret is also unlawful because the plug-in application causes the creation of a derivative work without the copyright owner’s authorization under 17 U.S.C. § 106(2), violating 17 U.S.C. § 1201(b)(1).\textsuperscript{89} Lastly, the Ripper was not declared illegal under 17 U.S.C. § 1201 because it can be used for legitimate purposes, such as

\begin{itemize}
\item \textsuperscript{81}. See id. at *6.
\item \textsuperscript{82}. See id. at *5.
\item \textsuperscript{83}. See id. at *6-*12.
\item \textsuperscript{84}. See id. at *7. A measure “effectively controls access” if it “requires the application of information or a process or a treatment, with the authority of the copyright holder, to gain access to the work.” See 17 U.S.C. § 1201(a)(3)(B) (1998).
\item \textsuperscript{87}. See RealNetworks, Inc., 2000 WL 127311, at *7.
\item \textsuperscript{88}. Id. at *8.
\item \textsuperscript{89}. See id. at *12.
\end{itemize}
allowing copyright owners to convert their works into other formats. Further, it was not proven that the Ripper would cause RealNetworks any injury. 90

However, the court’s reasoning for its decisions regarding the VCR and Ferret will have an impact on copyright owners, information users, and future producers of digital works. “Under the DMCA, product developers do not have the right to distribute products that circumvent technological measures that prevent consumers from gaining unauthorized access to or making unauthorized copies of works protected by the Copyright Act.” 91 Because Streambox does this with its products, especially the VCR, the products are not entitled to the fair use protections because the copyright owners had made efforts to prevent unauthorized copying. 92

Since anticircumvention technology has now been declared illegal, those who produce technology will not be subject to the same standards as prior to the 1998 enactment of the DMCA. Now “equipment manufacturers in the twenty-first century will need to vet their products for compliance with § 1201 in order to avoid a circumvention claim.” 93 The implementation of the anticircumvention ban has created a new standard, which all parties will have to follow. Copyright owners have a new way to protect their digital works and other people have to be careful how they try to get a “fair use” out of the works without violating 17 U.S.C. § 1201.

2. Universal City Studios, Inc. v. Reimerdes

The other important case that addresses the DMCA is Universal City Studios, Inc. v. Reimerdes, 94 which concerns the circumvention of technological protective measures on DVDs (digital versatile disks). 95 Plaintiffs, eight major motion picture studios, protect their movies in DVD format with an encryption program called CSS. 96 CSS, or Content Scramble System, is an access control and copy prevention system that is encryption-based and requires the use of “appropriately configured hardware such as a DVD player or a computer DVD drive to decrypt, unscramble and play back, but not copy, motion pictures

90. See id. at *10.
91. Id. at *8.
92. See id.
93. Id. (citing 1 Nimmer on Copyright § 12 A.18[B] (1999 Supp.)).
95. See id. at 294.
96. See id. at 303.
The movie studios developed this technology because of the fear of piracy since DVDs can be reproduced “without degradation from generation to generation.”\(^{98}\) To ensure that the decryption technology did not become available to everyone, the technology is licensed to manufacturers who produce the decryption hardware under strict security requirements; they cannot supply digital technology that would copy the files.\(^{99}\) These measures have been taken to guarantee that the copyrighted works will be protected and not infringed.

The defendants’ Web site offered DeCSS\(^{100}\) for downloading starting in November 1999 and contained links to other Web sites, which offered the program as well.\(^{101}\) Another program that is offered in conjunction with DeCSS is DivX, which is a program capable of compressing large, decrypted files at 4.3 to 6 GB or more to approximately 650 MB with no noticeable loss in quality.\(^{102}\) A writable CD-ROM can hold 650 MB, meaning that it is “entirely feasible to decrypt a DVD with DeCSS, compress it with DivX, and then make as many copies as one wishes by burning (copying) the resulting files onto writable CD-ROMs, which are sold blank for about one dollar apiece.”\(^{103}\) Thus, the availability of DeCSS on the Internet has effectively compromised the DVD copyright protective system created by the plaintiffs.\(^{104}\)

The focus of the case is § 1201(a)(2).\(^{105}\) Therefore, the court looks to the definition of “effectively controls access to a work” under § 1201(a)(3)(B).\(^{106}\) “One cannot gain access to a CSS-protected work on a DVD without application of the three keys that are required by

\(^{97}\) Id. at 308 (citing Trial Tr. (Shamos) at 24).
\(^{98}\) See id. at 309 (citing Trial Tr. (Corley) at 404, 408, 468, 470).
\(^{99}\) See id. at 310 (citing Trial Tr. (King) at 450-51, 492-93).
\(^{100}\) DeCSS is a computer program that “enables users to break the CSS copy protection system and hence to view DVDs on unlicensed players and make digital copies of DVD movies,” whose quality is identical to that of the encrypted movies. See id. at 308 (citing Trial Tr. (Shamos) at 25). DeCSS was created by Jon Johansen, a Norwegian student, and two others he met on the Internet by reverse engineering a licensed DVD, then placing the decrypted code on his Web site. See id. at 311. For many months since DeCSS has been available, many Web sites have downloaded it and now offer it to users, which is how the defendants received the program to offer on their Web site. See id.
\(^{101}\) See id. at 312 (citing Trial Tr. (Corley) at 791).
\(^{102}\) See id. at 313 (citing Trial Tr. (Shamos) at 42, 43-44, 54-56).
\(^{103}\) See id. at 314 (citing Trial Tr. (Ramadge) at 930, Trial Tr. (Shamos) at 56-57).
\(^{104}\) See id. at 315 (citing Trial Tr. (King) at 418).
\(^{105}\) See id. at 316.
\(^{106}\) See 17 U.S.C. § 1201(a)(3)(B) (1998). “If the measure, in the ordinary course of its 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.” Id.
Consequently, under the express terms of § 1201(a)(3)(B), CSS “effectively controls access” to copyrighted DVD movies. The only issue to settle is whether or not DeCSS is a violation of § 1201.

“Circumvent a technological measure” means to “descramble a scrambled work, to decrypt an encrypted work, ... without the authority of the copyright owner.” As DeCSS was designed to decrypt the CSS code protecting DVDs, DeCSS is “clearly a means of circumventing a technological access control measure.” As CSS effectively protected a copyrighted work and DeCSS was designed to circumvent the measure through decryption, defendants action of posting DeCSS to their Web site violated § 1201(a)(2)(A).

The defendants asserted three of the exemptions under the statute as defenses for their actions. First, defendants claim to fall under § 1201(f), the reverse engineering exemption. The court ruled that the exception does not apply to the defendants because they did not create DeCSS, they only posted it to their Web site. Under the provision, the sole purpose for the exemption is for achieving interoperability between systems, not for disseminating the circumvention means to the public. Plus, the creators themselves did not develop DeCSS to achieve interoperability; they wanted to decrypt the CSS system.

Second, the defendants tried to assert a § 1201(g)(4), an encryption research defense. This defense also failed as the defendants did not engage in any good faith encryption research. Instead, they just posted DeCSS on its Web site for the whole world to see and did not make any effort to provide the results to the copyright owners as the statute requires. Lastly and most importantly, the defendants asserted a fair use defense. As limited uses of portions of a copyrighted work are permissible under copyright law leaving the user free from liability
for copyright infringement, restricting access through technological means may affect the ability to make fair uses of a work. However, the defendants are not being sued for copyright infringement. Rather, they are being sued for “offering and providing technology designed to circumvent technological measures that control access to copyrighted works and otherwise violating Section 1201(a)(2) of the Act.” If Congress had wanted to include fair use as a defense for actions under § 1201(a)(2) it would have done so, but legislative history demonstrates that the decision not to do so was deliberate.

Congress instead tried to strike a balance between copyright owners and information users within the statute itself. However, it is uncertain if Congress was able to maintain the fair use doctrine within the statute. Essentially, the court asked “whether the possibility of noninfringing fair use by someone who gains access to a protected copyrighted work through a circumvention technology distributed by the defendants saves the defendants from liability under Section 1201.” The court found nothing in § 1201 to suggest this. By prohibiting circumvention technology, the DMCA fundamentally altered the landscape of fair use, meaning that now any device or piece of technology that might have a “substantial noninfringing use” under § 107, may “nonetheless still be subject to suppression under § 1201.”

This analysis illustrates the court’s belief that the intent of the parties, whether it was to infringe the copyrighted work or not, is irrelevant. All that matters is that the defendants circumvented the protective measures; it is the conduct or act that is key, not the motive behind it. As the court believes that Congress, based on its legislative history, did not want fair use to be a defense to § 1201, it rejected the defendants’ fair use defense as “entirely without merit.”

120. See id. at 321-22.
121. See id. at 322.
122. Id.
123. See id.
125. Universal City Studios, Inc., 111 F. Supp. 2d at 323.
126. See id.
127. See id.
128. See id. at 319.
129. See id.
130. The court stated, “The fact that Congress elected to leave technologically unsophisticated persons who wish to make fair use of encrypted copyrighted works without the technical means of doing so is a matter for Congress.” Id. at 324.
131. See id.
B. Section 1201 May Not Be What Congress Had Intended

Congress recognized the threat the digital environment would be to copyrighted work and was thus willing to implement the DMCA. However, there were some concerns, specifically the impact of the DMCA on the fair use doctrine. When the House Committee on Commerce was reviewing all the relevant issues, both public and private interest groups expressed their concerns over the future of the fair use doctrine. These groups felt the DMCA would undermine Congress’s long-standing adherence to the concept of fair use by diminishing the ability of people to make fair use of copyrighted works. They stated, “[I]t would be ironic if the great popularization of access to information, which is the promise of the electronic age, will be short-changed by legislation that purports to promote this promise, but in reality puts a monopoly stranglehold on information.” Congress attempted to allay these fears by inserting fair use into the Act by creating a balance between the interests of content creators and information users.

These concerns expressed by private and public interest groups have some merit. Congress stated that the principle of fair use exists within the DMCA, but query, is this really true? According to the court in *Universal City Studios, Inc. v. Reimerdes*, fair use is not a valid defense for a violation of § 1201 because Congress so deemed. Instead, the court upheld that Congress said a noninfringing use of a work can be a violation if someone had to circumvent a protective measure to use it. The addition of this statute may seriously alter the future of copyright law.

Now the focus is on the act of circumvention, not whether or not another party infringed the copyrighted work. Therefore, once a person engages in the act of circumvention, whether it is to make fair use of the work or to infringe upon it, the person has violated the DMCA. The balance Congress ostensibly sought appears not to exist. If it did, then a party would be able to assert some sort of fair use defense.

133. See id. at 26.
134. See id.
135. Id.
136. See id.
137. See id.
138. See Universal City Studios, Inc., 111 F. Supp. 2d at 324.
139. See id. at 323.
By adopting this approach, the scales have been tipped in favor of the copyright owner. To protect his or her copyrighted work in a digital form, all a creator has to do is implement a technological protective measure through “encryption, scrambling, authentication, or some other measure, which requires the use of a ‘key’ provided by a copyright owner to gain access to a work.” Once it is in place, any person who circumvents the measure to gain access will be in violation of § 1201. The copyright owner can gain relief by bringing a suit to enjoin the party from disseminating the circumvented material if there is evidence that future violations will occur. Therefore, the copyright owner has a stronger and more effective way to protect his or her copyrighted works that are on digital formats, compared to other copyright mediums.

Overall, the copyright owner gains more rights through the DMCA than they previously had. By being able to protect copyrighted works through technological protective measures, it ensures that information users cannot make fair use of the material as was previously allowed under copyright law. Therefore, the balance that Congress attempted to maintain has vanished in favor of greater rights for the copyright owner.

IV. CONCLUSION–ONE POSSIBLE FUTURE

Technological innovation is the wave of the future. The world may not look like the one envisioned in “The Jetsons,” but with every new technological advance society gets closer. As a result, more protective measures will be needed for copyrighted works. One of the first examples was the use of DVD encryption technology. Now, one of the latest developments is a computer or hand-held device that enables you to read a digitally formatted book, an e-book. Therefore, the next set of cases could be about someone who circumvented protective measures (if they have been placed within the digital format of the work) on copyrighted e-book titles in violation of § 1201.

The world may one day, soon, go completely digital, where all copyrighted works will have a technological protective measure in place. When, and if, that day comes, information users will no longer be able to utilize the fair use doctrine. Instead, copyright owners will have a monopoly over their work. As it presently stands, based on the wording of the DMCA and the legislative history, copyright owners

have gained more rights and control over their works to the detriment of the information users.

The world of technology as we know it is constantly changing. World leaders previously came together under WIPO in an attempt to ensure their laws keep pace with these changes.\(^{142}\) The U.S. implementation of the decisions made by the WIPO countries resulted in the DMCA.\(^{143}\) In the new digital environment it is a much-needed law in order to protect copyright owners from over-abundant infringement,\(^{144}\) but it must be further revised to address its emasculation of the fair use doctrine.

Congress attempted to create a statute that would solve the problem of digital piracy and maintain the status quo balance of the fair use doctrine. However, Congress did not foresee the interpretation courts would give the DMCA. Because of ambiguous language, Congress opened the door for judicial interpretation. Courts will not go against clear statutory legislation enacted by Congress.\(^{145}\) As time goes on and more cases like *RealNetworks, Inc. v. Streambox, Inc.* and *Universal City Studios, Inc. v. Reimerdes* are brought into the legal system, the copyright owner’s rights will continue to strengthen under the statute.

If the world comes to rely on digital, rather than traditional, forms of copyrighted works, those works will most likely be protected by technological measures and be unavailable to information users for fair use purposes. To ensure that someone who wants to make fair use of a protected work does not become subject to a § 1201 violation, Congress should add an amendment for clarification purposes that addresses public usage of digital works.

The amendment should state that public institutions, such as public schools or libraries, be allowed to keep copies of the protected digital work on hand for the public to engage in fair use of the copyrighted works. It should be added that the institution cannot have personally circumvented the codes to gain access, but instead received access and permission to allow the public to use the works for legitimate reasons from the copyright owner. This would enable information users to engage in fair use of technologically protected copyrighted works without having to buy the necessary equipment, such as a computer or DVD player, to access them. As not everyone can afford the legal and necessary decryption technology to access

\(^{143}\) See id.
\(^{144}\) See id. at 25.
\(^{145}\) See *Universal City Studios, Inc.*, 111 F. Supp. 2d at 324.
digital copyrighted works, this amendment could give them access and prevent attempts at decrypting protective measures or using already created decryption software to use the works.

An amendment such as this would make the balance Congress desired within the DMCA a reality. Additionally, the copyright owner’s digital works could still be protected by technological protective measures under § 1201. However, information users would be allowed to have access to protected works if certain institutions were allowed to grant them access. We can only hope Congress amends the DMCA to bring about the balance between copyright creators and the information users it set out to ensure.