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EXPANDING THE DMCA: THE IMPORTANCE OF REGULATING COMPUTER CODE

I. INTRODUCTION

For years, the evolution of the technological world has brought to light new challenges to our country's most basic freedom: the First Amendment's Freedom of Speech. Recognizing this, our United States Supreme Court has laid a foundation to enable interpretation of the First Amendment and how it should be applied as new technological advancements transpire. One technological advancement that is in need of regulation is the use of computer code solely for the purpose of decrypting copyrighted material. Regulation is needed in order to prevent the First Amendment from protecting the use of computer codes created solely for

1. Electronic Privacy Information Center, Free Speech: First Amendment Law and Technology ¶ 25 <http://www.epic.org/free_speech> (last updated Dec. 10, 2001) (stating "[w]hen the First Amendment was adopted, the 'speech' at issue was person-to-person or newsprint. As new methods of communication are developed, they have presented unique challenges to First Amendment doctrine").


3. Dictionary.com, Computer Code ¶ 1 <http://www.dictionary.com/search?q=computer%20code> (accessed Feb. 14, 2002) (noting computer code is defined as "the symbolic arrangement of data or instructions in a computer program or the set of such instructions").


In an era in which the transmission of computer viruses—which like the decryption program in question—are simply computer code and thus to some degree expressive—can disable systems upon which the nation depends and in which other computer code also is capable of inflicting other harm, society must be able to regulate the use and dissemination of code in appropriate circumstances.

Id. (quoting Honorable Lewis A. Kaplan).
the purpose of aiding hackers\(^6\) or, as a new term has evolved, crackers.\(^7\)

If computer code is given an outright status of protection under the First Amendment's freedom of speech, the consequences could be disastrous;\(^8\) the national economy would suffer\(^9\) and the incentive to create new media devices such as the DVD would be diminished.\(^10\) Another consequence would be the mass bootlegging\(^11\) of DVDs.\(^12\) In order to prevent the aforementioned consequences, a line needs to be drawn stating exactly what forms of computer code are in need of regulation.\(^13\)

First, this Comment will give a background of the DVD and how it is

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An individual who breaks into computers primarily for the challenge and status of obtaining access. A person who enjoys exploring the details of computers and how to stretch their capabilities. A malicious or inquisitive meddler who tries to discover information by poking around. A person who enjoys learning the details of programming systems and how to stretch their capabilities, as opposed to most users who prefer to learn on the minimum necessary [sic]. One who is knowledgeable about computers and creative in computer programming, usually implying the ability to program in assembly language or low-level languages. A hacker can mean an exact programmer who finds special tricks for getting around obstacles and stretching the limits of a system. To some people it means an unconventional programmer or one who is not formally trained, or one who jerry-rigs programs (making temporary fixes that are not well-done).

Id.

7. Pcwebopedia.com, Crack \¶ 1 <http://www.pcwebopedia.com/Term/c/crack.html> (accessed Feb. 14, 2002) (noting that in the 1980's, "hackers," who consider themselves as legitimate computer experts using their knowledge for "playful pranks," coined the term "crackers"). This was done in order to distinguish themselves from those intending to solely break into secure systems. Id.

8. David A. Petteys, Student Author, The Freedom to Link?: The Digital Millennium Copyright Act Implicates the First Amendment in Universal City Studios, Inc. v. Reimerdes, 25 Seattle U. L. Rev. 287, 339 (Summer 2001) (stating "to suggest that the government is powerless to regulate code because code by definition constitutes speech, regardless of the consequences, is an invitation to anarchy").

9. Rachel Simpson Shockley, The Digital Millennium Copyright Act and the First Amendment: Can They Co-Exist?, 8 J. Intell. Prop. L. 275, 277 (detailing that the motion picture industry is extremely important to the national economy as a whole).

10. Aaron Pressman, Consumers in Crossfire of Labels' War on Piracy, The Christian Science Monitor, 18 (Mar. 4, 2002) (explaining that the incentive to create new work will continue to diminish if the piracy of protected work goes unregulated).


12. Universal City Studios v. Corley, 273 F. 3d 429, 435 (2d Cir. 2001) [hereinafter Corley] (stating a digital versatile disk, or DVD, is an optical media storage device whose primary function is to store movies for playback).

13. Shockley, supra n. 9, at 277 (noting if computer code is not regulated, the national economy as a whole could suffer). "[W]ithout adequate protection from piracy, the movie industry will experience a severe devaluation, and because the industry is so important to the national economy, the effects would be far reaching." Id.
affecting the technological world. Next, a computer code called CSS, which encrypts the contents of DVDs, will be explained in detail. Third, another computer code called DeCSS, which was designed to decrypt CSS and the contents of DVDs making them vulnerable to bootlegging, will be explained. Fourth, this Comment will focus on current legislation and caselaw dealing with computer code. The fifth aspect of this Comment will analyze the current legislation along with the relationship between computer code and the First Amendment, ultimately arguing why there is a need for further legislation that will protect copyrighted material from being stolen through the use of computer code. The analysis will explain why computer code should be protected under the First Amendment. It will also address why this protection should not be absolute. In addition, the competing view of those who say that computer code should be given blanket protection under the First Amendment will be addressed. Lastly, a legislative solution will be proposed, which will regulate specific computer code. This Comment will demonstrate that the legislative proposal will not infringe on First Amendment rights as the proposal will serve to regulate what is considered the content-neutral aspect of computer code. The proposed legislative solution will keep computer code protected by the First Amendment. However, the proposed legislative solution will target and prohibit computer codes directed solely at decrypting protected material, such as the DeCSS code. This new legislation, as proposed, will prohibit those who create decrypting computer codes with the intention of circumventing protected material from using the First Amendment as a defense for their actions.

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15. Dictionary.com, *Encrypt* <http://www.dictionary.com/search?w=encrypt> (accessed Apr. 13, 2002) (noting that as it pertains to the computer world, encrypt means, "[t]o alter (a file, for example) using a secret code so as to be unintelligible to unauthorized parties").

16. *Corley*, 273 F. 3d at 437-38 (stating that Decrypted Content Scrambling System, or DeCSS, was designed to decrypt CSS thus allowing the contents of the DVD to be copied).

17. *Webster’s 3rd New International Dictionary of the English Language* (Merriam-Webster Inc., Publg. 1993) (noting that Blanket Authority is defined as “effective or applicable in all instances or contingencies”).

18. *Universal City Studios v. Reimerdes*, 111 F. Supp. 2d 294, 328-29 (S.D.N.Y. 2000) [hereinafter *Reimerdes II*] (explaining the meaning of content-neutral, the District Court states that computer code does more than express a message). Computer code serves a function when it instructs a computer to perform various tasks. *Id.* The computer code instructing a computer to perform a task constitutes functionality and is thus determined to be content-neutral or merely functional. *Id.*
II. BACKGROUND

In order to understand the implications of granting computer codes such as DeCSS blanket coverage under the First Amendment, a background and history of DVDs, CSS, and DeCSS is necessary.\textsuperscript{19} This background will shed light on the importance of protecting the contents of DVDs from decryption codes such as DeCSS.

A. DVD

The origin of the DVD began in 1994 when two optical media devices,\textsuperscript{20} the Super Disc and the Multimedia CD, were produced.\textsuperscript{21} It wasn't until 1996, however, that the Super Disc and Multimedia CD were converted into the DVD that is common today.\textsuperscript{22} The DVD has the same physical size as the traditional compact disc ("CD").\textsuperscript{23} It holds, however, 4.7 gigabytes\textsuperscript{24} of information on one of its two sides.\textsuperscript{25} This constitutes twenty-eight times the amount of memory that a CD is capable of storing.\textsuperscript{26} The main function of the DVD is to store and playback movies in a digital form, which produces a vastly improved viewing quality over the traditional video cassette.\textsuperscript{27} The United States District Court in \textit{Universal City Studios v. Reimerdes}\textsuperscript{28} made it clear that DVDs

\textsuperscript{19} See generally Roz Pelayo, Paul Chiaffredo, Jane Duong & Damian Luna, \textit{Analysis of the DVD Industry} 2-4, 15-16 <http://codesign.scu.edu/carlson/bts09/paper.doc> (Winter 2000).

\textsuperscript{20} SearchWindowsManageability.techtarget.com, \textit{Fast Guide to CD/DVD} ¶ 3-7 <http://searchwindowsmanageability.techtarget.com/definition/0,,sid33_gci514667,00.html> (accessed Feb. 14, 2002) (noting another example of an optical media device is the traditional Compact Disc [hereinafter CD]). These devices are both written and read through the use of lasers as compared to the magnetic media devices such as audio and video cassettes which are read through contact. \textit{Id.}

\textsuperscript{21} \textit{Id.} at ¶ 3 (explaining the origin of the DVD through the evolution of the Super Disc and the Multimedia CD).

\textsuperscript{22} \textit{Id.} (demonstrating the joining of competing technologies to eventually agree on the DVD becoming the standard digital media device).


\textsuperscript{24} Dictionary.com, \textit{Gigabyte} ¶ 2 <http://www.dictionary.com/search?q=gigabyte> (accessed Apr. 13, 2002) (explaining a gigabyte is defined as "a unit of information equal to one billion (1,000,000,000) bytes or one thousand megabytes").

\textsuperscript{25} \textit{Digital Versatile Disc, supra} n. 23, ¶ 1.

\textsuperscript{26} \textit{Id.} (stating "[t]he DVD can hold more than twenty-eight times as much information as the CD").

\textsuperscript{27} Corley, 273 F. 3d at 436 (explaining the multiple advantages that the DVD contains as compared to the traditional video cassette).

\textsuperscript{28} \textit{Universal City Studios v. Reimerdes}, 82 F. Supp. 2d 211 (S.D.N.Y. 2000) [hereinafter \textit{Reimerdes I}].
are increasingly gaining popularity\textsuperscript{29} as a means for enjoying high-quality digital videos at home.\textsuperscript{30}

B. CSS

The major flaw of DVDs is that their quality is so great that they are subject to "an enhanced risk of unauthorized reproduction and distribution because digital copies made from DVDs do not degrade from generation to generation."\textsuperscript{31} In order to prevent against this "unauthorized reproduction and distribution,"\textsuperscript{32} the motion picture companies decided that they needed to create a system which would eliminate their well-grounded fear\textsuperscript{33} of potential bootlegging.\textsuperscript{34}

In 1996, members of the consumer electronics and computer industries created Content Scramble System, or "CSS."\textsuperscript{35} CSS consisted of an algorithm\textsuperscript{36} arranged by a set of "keys" which encrypted the contents of DVDs.\textsuperscript{37} The exact algorithm devised was a "type of mathematical formula for transforming the contents of the movie file into gibberish;\textsuperscript{38}"

\begin{itemize}
\item \textsuperscript{29} Id. at 214 (stating "olver 4,000 motion pictures now have been released in [DVD] formation in the United States, and movies are being issued on DVDs at the rate of over 40 new titles per month in addition to rereleases [sic] of classic films. More than 5 million DVD players have been sold, and DVD disc sales now exceed one million units per week").
\item \textsuperscript{30} Reimerdes II, 111 F. Supp. 2d at 310 (quoting Trial Transcript at 442). By the end of the year 2000, it was estimated that ten percent of American homes would contain a DVD player. Id. Thirty-five percent of one motion picture studio's revenue came directly from DVD rental and sale. Id. at 310, n. 69 (quoting trial transcript at 403).
\item \textsuperscript{31} Reimerdes I, 82 F. Supp. 2d at 214.
\item \textsuperscript{32} Id.
\item \textsuperscript{33} Anti-Piracy § Introduction <http://www.mpaa.org/anti-piracy/index.htm> (accessed April 15, 2002) [hereinafter Anti-Piracy] (noting the fear that the motion picture studios had of bootlegging is legitimate as evidenced by the $ 3 billion loss in revenue that occurs annually due to piracy). An example of what piracy can do to the motion picture industry was evidenced when Star Wars: Episode I - The Phantom Menace was released throughout Asia. Id. § The Economic Picture. In this instance, pirated copies of the movie were rampant throughout Asia before the release of the film which resulted in revenue lost at the box office and revenue lost at movie retail shops. Id.
\item \textsuperscript{34} Reimerdes I, 82 F. Supp. 2d at 214 (noting that the motion picture studios of the United States, "insisted upon the development of an access control and copy prevention system to inhibit the unauthorized reproduction and distribution of motion pictures before they released films in DVD format.").
\item \textsuperscript{35} Corley, 273 F. 3d at 436 (explaining that the members of the consumer electronics and computer industries coupled with the aide of the movie studios ultimately created CSS as their security device).
\item \textsuperscript{36} Diamond v. Diehr, 450 U.S. 175, 186 (1981) (quoting Gottschalk v. Benson, 409 U.S. 63, 65 (1972)) (noting that as defined by the Supreme Court, an algorithm is "a procedure for solving a given type of mathematical problem").
\item \textsuperscript{37} Corley, 273 F. 3d at 436 (making clear the manner is which CSS functions).
\item \textsuperscript{38} Dictionary.com, Gibberish ¶ 2 <http://www.dictionary.com/search?q=gibberish> (accessed Apr. 13, 2002) (noting that Gibberish is defined as "Rapid and inarticulate talk; unintelligible language; unmeaning words; jargon").
\end{itemize}
the 'keys' are in actuality strings of zeros and ones that serve as values for the mathematical formula.\textsuperscript{39}

Now that a security device was in place, the motion picture studios were ready to make DVDs available to the public.\textsuperscript{40} In doing so, the motion picture studios developed license agreements with the manufacturers of DVD players.\textsuperscript{41} The DVD manufacturers received the “keys” to the algorithm which were then implemented into the DVD players and the motion picture studios received an “administrative fee” along with an assurance that the “keys” and any information regarding CSS data would remain confidential.\textsuperscript{42} Once the DVD players had the “answer” to CSS in place, they were capable of decrypting the contents of the DVD for viewing.\textsuperscript{43} The ability to duplicate the contents of the DVD, however, was still restricted through the CSS code.\textsuperscript{44}

C. DeCSS

In September of 1999, a Norwegian teenager named Jon Johansen, along with two individuals whom he met on the Internet,\textsuperscript{45} created a computer code that was to be known as DeCSS.\textsuperscript{46} Johansen claimed that he created DeCSS in order to view DVDs on his computer, which operated on the Linux\textsuperscript{47} operating system,\textsuperscript{48} an operating system incapable of supporting any licensed DVD players.\textsuperscript{49} Johansen created DeCSS by

\begin{thebibliography}{99}
\bibitem{39} Corley, 273 F. 3d at 436.
\bibitem{40} Id. at 437 (stating “[w]ith encryption technology and licensing agreements in hand, the studios began releasing movies on DVDs in 1997”).
\bibitem{41} Id. (explaining how the studios and the DVD manufacturers developed a licensing scheme which implemented CSS).
\bibitem{42} Id. (explaining the licensing agreements reached between the motion picture studios and the manufacturers of DVD players).
\bibitem{43} Id.
\bibitem{44} Id. (demonstrating that the CSS code allowed for the DVD to be viewed but not copied).
\bibitem{45} Reno v. ACLU, 521 U.S. 844, 849-50 (1997) (explaining “[t]he Internet is defined by the Supreme Court as “an international network of interconnected computers . . . enabling] tens of millions of people to communicate with one another and to access vast amounts of information from around the world”).
\bibitem{46} David M. Ewalt, DeCSS Case Could Change Your IT Shop ¶ 7, 10 <http://www.informationweek.com/story/IWK20010711S0010> (July 16, 2001).
\bibitem{47} Linux.com, Introduction to Linux and Linux.com ¶ 3-4 <http://linux.com/article.pl?sid=02/03/09/1727250> (Mar. 2002) (defining Linux as a free operating system).
\bibitem{48} Dictionary.com, Operating System ¶ 1 <http://www.dictionary.com/search?q=operating%20system> (accessed Apr. 14, 2002) (noting that operating system is defined as “Software designed to control the hardware of a specific data-processing system in order to allow users and application programs to make use of it”).
\bibitem{49} Ewalt, supra n. 46, ¶ 7, 9. DVD players capable of decrypting CSS were only available for Windows and Macintosh operating systems, not Linux. Id.
\end{thebibliography}
reverse-engineering a DVD player licensed with CSS. DeCSS ultimately decrypted CSS thus allowing for the copying of a DVD's contents onto the hard drive of the computer being used. Once the contents were on the computer's hard drive, they could be "copied, manipulated, and transferred just like any other computer file . . . . This compressed file can [then] be copied onto a DVD, or transferred over the Internet." Soon after he completed constructing the DeCSS code, Johansen made DeCSS available on the Internet for others to download and use.

D. THE IMPACT OF DECSS: THE CORLEY DECISION WITH SUPPORTING & OPPOSING VIEWS

Once the motion picture studios discovered DeCSS and the impact that it could potentially have on their industry, they decided that they must take action. The motion picture studios filed suit in the United States District Court for the Southern District of New York seeking to enjoin defendants Eric Corley, Shawn Reimerdes, and Roman Kazan, all distributors of DeCSS through the Web, from distributing the code to the general public. The District Court, relying on the Digital Millennium Copyright Act ("DMCA"), granted a preliminary injunction forcing Cor-

50. Rockwell Graphic Sys. v. DEV Indus., 91 F.3d 914, 917 n. 3 (7th Cir. 1996) (quoting Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470, 476 (1974)). "Reverse engineering is a method of industrial engineering in which one begins with a known finished product and works backward to divine the processes and specifications involved in the product's development and manufacture." Id.
51. Corley, 273 F.3d at 437.
52. Id.
53. Id. at 437-38.
54. Dictionary.com, Download § 1 <http://www.dictionary.com/search?q=download> (accessed Feb. 15, 2002) (noting that downloading is defined as, "[t]o transfer data or (especially) code from one computer to another. The distinction between downloading and uploading is hazy but downloading often refers to transfer from a 'larger' host system (especially a server or mainframe) to a smaller 'client' system, especially a microcomputer or specialized [sic] peripheral").
55. Corley, 273 F.3d at 438.
56. Shockley, supra n. 9, at 277 (explaining the motion picture studios were concerned with the loss of revenue that would result from their products being copied and sold). "According to the Vice-president of Trade and Federal Affairs for the Motion Picture Association of America (MPAA), the American film industry loses almost $ 2.5 billion a year because of inadequate protection available to intellectual property in the face of current technology." Id.
57. Corley, 273 F.3d at 440 n. 8 (noting the original lawsuit was filed against Eric Corley, Shawn Reimerdes, and Roman Kazan). A settlement was reached between Reimerdes and Kazan leaving Corley as the sole defendant until 2600 Enterprises.com, a Web site Corley owned, was added. Id.
58. Id. (stating the purpose behind the DMCA was to protect the holders of copyrights from the "circumvention of technological measures").
ley to cease providing DeCSS on his Web site, The District Court relied on the DMCA because it makes the use of codes such as DeCSS, which circumvent protection systems, criminal acts. The DMCA makes it illegal to:

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 or use in circumventing a technological measure that effectively controls access to a work protected under this title.

Corley technically complied with this injunction. However, Corley continued to post links on his Web site to various other Web sites containing and promoting DeCSS. As a result, Corley was permanently barred, through another injunction, from both posting DeCSS on 2600.com and from posting links on his Web site to other Web sites affiliated with DeCSS. Corley immediately appealed the District Court's

60. Susan Dunn, Negotiating Web Site Agreements: Sixteenth Annual Institute on Computer Law, 444 Prac. L. Inst. 467, 469 (1996) (stating a Web site is "a collection of files stored on a file server that is accessible to users of the World Wide Web, a network of servers and information available on the Internet").
61. Henderson, supra n. 14, at 24. 2600.com was designed by Eric Corley as a Web site dedicated to hackers. Id.
64. Corley, 273 F.3d at 441 (stating "[t]he Defendants complied with the preliminary injunction").
65. Techdictionary.com, Link ¶ 6 <http://www.techdictionary.com/Action.Lasso> (accessed Feb. 16, 2002) (noting that [l]ink is defined as, "[a] pointer in an HTML document that leads to another World Wide Web site, or to another place within the same document; also called a hyperlink").
66. Corley, 273 F.3d at 441 (stating "[t]he Defendants . . . continued to post links to other Web sites carrying DeCSS").
67. Id. at 443 (quoting Reimerdes II, 111 F. Supp. at 346-47).

The Court's injunction barred the Defendant's from: 'posting on any Internet Web site DeCSS; 'in any other way . . . offering to the public, providing, or otherwise trafficking in DeCSS'; violating the anti-trafficking provisions of the DMCA in any other manner, and finally 'knowingly linking any Internet Web site operated by them to any other Web site containing DeCSS, or knowingly maintaining any such link, for the purpose of disseminating DeCSS.'

Id.
decision claiming that the decision violated the First Amendment’s Freedom of Speech.\textsuperscript{68} On appeal, Corley argued that computer code is a form of absolute speech and is thus immune from regulation due to the First Amendment’s granting of the freedom of speech.\textsuperscript{69} Ultimately, the United States Court of Appeals affirmed the District Court’s decision.\textsuperscript{70}

In affirming the District Court’s decision, the Appellate Court made it clear that only narrow holdings are to be implemented when dealing with Constitutional issues involving newly arising technologies.\textsuperscript{71} The Appellate Court therefore concluded that computer code is protected as an expression of free speech under the First Amendment of the Constitution, but the scope of that protection is not to be deemed absolute.\textsuperscript{72} As was stated by Judge Newman in the Corley decision, this scope of protection is not absolute because the framers of our Constitution were “not thinking about computers, computer programs, or the Internet” when they drafted the First Amendment of the Constitution.\textsuperscript{73} Newman also stated that as the technological world evolves, especially in the realm of the cyber world, new First Amendment issues will continuously arise.\textsuperscript{74}

\subsection*{E. Contradicting Corley}

The movie industries across America saw the Corley decision as a victory while computer programmers saw the decision as severely limiting the freedom of speech.\textsuperscript{75} Court’s are already beginning to split on where the line should be drawn in regards to the speech and nonspeech aspects of computer code.\textsuperscript{76} In contradiction to the Corley decision, a California Appellate Court in \textit{DVD Copy Control Assn. v. Bunner}\textsuperscript{77} found that making DeCSS available on Web sites for others to use is “pure

\begin{itemize}
\item \textsuperscript{68} \textit{Id.} at 436 (explaining that Corley appealed the District Court’s decision based on First Amendment violation).
\item \textsuperscript{69} \textit{Id.} (explaining Corley’s stance that computer code should be subject to absolute protection by the First Amendment).
\item \textsuperscript{70} \textit{Id.} at 459-60.
\item \textsuperscript{71} \textit{Id.} at 445 (quoting \textit{Name.Space, Inc. v. Network Solutions, Inc.}, 202 F.3d 573, 584 (2d Cir. 2000)).
\item \textsuperscript{72} \textit{Id.} (noting “[c]ommunication does not lose [C]onstitutional protection as ‘speech’ simply because it is written in ‘code’”). The court further stated that “computer code, and computer programs constructed from code can merit First Amendment protection, although the scope of such protection remains to be determined.” \textit{Id.} at 449.
\item \textsuperscript{73} \textit{Id.} at 434.
\item \textsuperscript{74} \textit{Id.}
\item \textsuperscript{76} Henderson, \textit{supra} n. 14, at 25.
\item \textsuperscript{77} \textit{DVD Copy Control Assn. v. Bunner}, 93 Cal. App. 4th 648 (6th Dist. 2001) [hereinafter \textit{Bunner}].
\end{itemize}
speech' within the ambit of the First Amendment. It was also stated that DeCSS is Constitutionally protected because "[it is a] written expression of the author's ideas and information about decryption of DVDs without CSS." The Bunner court's decision that DeCSS is pure speech under the First Amendment is in direct contradiction with the Corley decision that DeCSS is not speech subject to absolute protection.

F. THE FREEDOM OF SPEECH IS NOT ABSOLUTE.

The freedom of speech was not intended to be absolute. Some forms of speech can be outlawed or penalized — and many have been. Some examples are: child pornography, fighting words, discriminatory advertising, and lastly, "speech that infringes a copyright." Computer code, according to the Appellate Court, consists of nonspeech and speech elements. It is the nonspeech element of computer code that the DMCA can regulate. The court explains that this regulation does not interfere with the speech aspect of computer code, rather it merely restricts what is "content-neutral," or mechanical function, in the code.

G. HOW CONTENT NEUTRAL SPEECH IS REGULATED

It is a fact that computer code, in general, is a form of speech. The question then is: does computer code, such as DeCSS, fall into the cate-

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78. Id. at 664 (noting as of Feb. 20, 2002, the California Supreme Court granted review of Bunner). The Corley court refused to follow the decision in Bunner. Corley, 273 F.3d at 455. Upon review, should the California Supreme Court decide to follow the Corley decision, the proposal for new computer code legislation will still be reinforced as the court would recognize that decrypting computer code is not intended to be protected under the First Amendment.

79. Id. at 661.


81. Id. (demonstrating that the First Amendment was never intended to grant blanket protection to all forms of speech).

82. Id.


84. Id. at 454 (stating "[t]he DMCA and the posting prohibition are applied to DeCSS solely because of its capacity to decrypt CSS. That functional capability is not speech within the meaning of the First Amendment").

85. Id. (explaining the content-neutral or functional aspect of computer code is what the code does to a computer when it causes the computer to perform a certain function). Causing a computer to perform tasks constitutes the non-speech aspect of computer code.

86. Id. (explaining that the nonspeech element of computer code is what is subject to regulation).

87. Id. at 446 (stating "communication does not lose Constitutional protection as 'speech' simply because it is expressed in the language of computer code").
The answer to that question is yes. The reasoning is that computer code, as a whole, is not specifically speech. Computer code, rather, is both speech and non-speech in that it is expressive and functional. The speech element is expressive in nature while the nonspeech element is merely functional in nature. The court in Corley made it clear that the functional, or nonspeech element of computer code, which ultimately directs a computer to perform, is what the government is interested in regulating.

In deciding on how to regulate, without violating the First Amendment, this nonspeech element of computer code, or, as the Corley court identified as the "content-neutral" element of computer code, the Corley court relied on United States v. O'Brien for guidance. The United States Supreme Court in O'Brien made it clear that in order to regulate the content-neutral or nonspeech aspect of computer code, it is imperative to demonstrate a justification for the regulation. Thus, the O'Brien court devised the following four part test for determining the Constitutionality of content-neutral regulation.

88. Turner, supra n. 79, at ¶ 3 (explaining that there are types of speech which can be rendered illegal without violating the First Amendment).

89. Corley, 273 F.3d at 454 (quoting "DeCSS – has both a nonspeech and a speech component").

90. Id. at 451 (stating "[t]hese realities of what code is and what its normal functions are require a First Amendment analysis that treats code as combining nonspeech and speech elements").

91. Id. (explaining the nonspeech or functional aspect of computer code will only gain the capability of functioning when human action takes place such as the inserting of a disk into a computer).

92. Id. at 454 (explaining that the content-neutral nonspeech aspect of computer code is what the government can control as it does not constitute speech).

93. Id. at 454-55 (explaining that the information that DeCSS conveys is not being regulated but rather the function of DeCSS, as it decrypts CSS, is what is to be regulated).

94. U.S. v. O'Brien, 391 U.S. 367, 376-77 (1968) (explaining the manner in which the nonspeech aspect of conduct can be regulated when speech and nonspeech elements are combined in the same conduct).

95. Corley, 273 F.3d at 442 (explaining that the DMCA is targeting only the functional aspect of computer code and not the expressive aspect and thus the test outlined by O'Brien will be administered to DeCSS).

greater than is essential to the furtherance of that interest.\textsuperscript{97}
The Corley court held that the injunction barring the posting of DeCSS meets these requirements.\textsuperscript{98}

III. ANALYSIS

There are those who believe that computer code should be given blanket protection under the First Amendment\textsuperscript{99} and there are those who believe that the content-neutral aspect of computer code does not constitute speech and should thus be subject to regulation.\textsuperscript{100} The federal government must draw a line as to whether or not computer code may be regulated. Some believe that this has already been accomplished through the DMCA.\textsuperscript{101} As the California Appellate court\textsuperscript{102} in Bunner exemplified, however, the question of whether or not computer codes aimed at decrypting security devices, such as DeCSS, should be afforded protection under the First Amendment is still an issue.\textsuperscript{103}

\textsuperscript{97} Id. at 376-77 (explaining the test used in determining the regulation of content-neutral expression). \textit{See generally} Ronald D. Rotunda & John E. Nowak, \textit{4 Treatise on Constitutional Law} § 20.49, 640-41 (West Group 1999).

\textsuperscript{98} Corley, 273 F.3d at 454-55.

The government's interest in preventing unauthorized access to encrypted copyrighted material is unquestionably substantial, and the regulation of DeCSS by the posting prohibition plainly serves that interest. Moreover, that interest is unrelated to the suppression of free expression . . . . But a content-neutral regulation need not employ the least restrictive means of accomplishing the governmental objective. The prohibition on the defendants' posting of DeCSS satisfies that standard.

\textit{Id.}

\textsuperscript{99} Bunner, 93 Cal. App. 4th at 662 (noting “[a]lthough the social value of DeCSS may be questionable, it is nonetheless pure speech”). “Because computer source code is an expressive means for the exchange of information about decryption programming, we hold that it is protected by the First Amendment.” \textit{Id.} at 661 (quoting \textit{Junger v. Daley}, 209 F.3d 481, 485 (6th Cir. 2000)).

\textsuperscript{100} Corley, 273 F.3d at 453.

But just as the realities of what any computer code can accomplish must inform the scope of its [C]onstitutional protection, so the capacity of a decryption program like DeCSS to accomplish unauthorized – indeed, unlawful – access to materials in which the Plaintiffs have intellectual property rights must inform and limit the scope of its First Amendment protection.

\textit{Id.}

\textsuperscript{101} 17 U.S.C.S. § 1201(a)(1)(A) (2001) (explaining the DMCA states in part that “No person shall circumvent a technological measure that effectively controls access to a protected work”).

\textsuperscript{102} Bunner, 93 Cal. App. 4th at 664.

\textsuperscript{103} Henderson, \textit{supra} n. 14, at 25 (quoting attorney Stewart Baker, “\textit{Corley} and \textit{Bunner} ‘are very thoughtful, but flawed, opinions that indicate the tools we have for dealing with these issues aren't very effective’”). Law professor David Post of Temple University also stated that, “[t]he line between what is software and what is property is going to be blurred. There may be a line there; I'm sure there is. But we don't really understand how to draw it.” \textit{Id.} at 24.
EXPANDING THE DMCA

should ultimately decide this question and amend the DMCA to include a provision dealing with the restriction of computer codes such as DeCSS because courts are struggling with the issue and are returning conflicting decisions. Opinions that differ so drastically as Corley and Bunner will only make the line between free speech and mechanical function more unclear. By amending the DMCA and adding provisions dealing with computer code, the courts will have the line defined for them making it easier to decide the Constitutionality of computer codes such as DeCSS.

If the court in Corley found that the requirements necessary to regulate computer code such as DeCSS were satisfied, one would want to know why then, is there a need for legislation that would also regulate such computer code? The answer to this question comes in two parts: 1) other courts have already held to the contrary of Corley in deciding that computer codes such as DeCSS should be given blanket protection under the First Amendment, and 2) even though it seems as if the issue regarding decryption codes, such as DeCSS, has been addressed and dealt with through the Corley decision, it is Congress that ultimately has the best means necessary to fully resolve the issue.

A. Corley Is Not Universal.

As previously stated, the California Appellate Court in Bunner held that DeCSS, even though its function is to decode CSS, is still expressive and is thus afforded protection by the First Amendment's freedom of speech. The Bunner court stated, "regardless of who authored the program, DeCSS is a written expression of the author's ideas and information that is protected by the First Amendment." The Corley court found otherwise, and the issue was resolved through the Bunner decision.

104. Id. (explaining that the Corley and Bunner decisions are conflicting).
105. Id. (explaining that the conflicting opinions of Corley and Bunner make the line between free speech and mechanical function very unclear).
106. Bunner, 93 Cal. App. 4th at 664 (explaining that the republication of DeCSS constitutes pure speech under the First Amendment which is in contrast to the Corley court's decision).
107. Id. at 662 (explaining that the social value of DeCSS is irrelevant and thus free speech protection is afforded).
108. Corley, 273 F.3d at 451 (finding that computer code consists of speech and non-speech aspects).
109. Beyond Napster, supra n. 5, at 421-22 (stating "it is Congress that is in a position to hear from all relevant constituencies and to attempt to strike an appropriate balance").
110. Bunner, 93 Cal. App. 4th at 652 (noting "DeCSS consists of a computer source code which describes a method for playing an encrypted DVD on a non-CSS-equipped DVD player or drive").
111. Id. at 661 (quoting "like the CSS decryption software, DeCSS is a writing composed of computer source code which describes an alternative method of decrypting CSS-encrypted DVDs").
mation about decryption of DVDs without CSS.\textsuperscript{112} In the end, the Bunner court decided that the First Amendment's protection of free speech trumps the effects that decryption codes such as DeCSS will have on society.\textsuperscript{113}

It should be noted that Bunner is currently under review by the California Supreme Court.\textsuperscript{114} If it is upheld and DeCSS is deemed worthy of protection as an expressive form of speech, a direct conflict will arise between the Bunner court’s decision and the Appellate Court’s decision in Corley.\textsuperscript{115} Having two courts with holdings that are in conflict will only make the issue of the regulation of computer code that decrypts protected material that much more hazy.\textsuperscript{116} These two conflicting opinions make the line between what the government can and cannot do to regulate decrypting computer code ambiguous.\textsuperscript{117} For the purposes of this Comment, it is immaterial that Bunner is a state court decision while Corley is a federal court decision. The two conflicting opinions are just examples demonstrating that the regulation of decrypting computer code is an unsettled issue.\textsuperscript{118} Legislation would have the affect of settling the issue.\textsuperscript{119}

B. **Congress Should Regulate Decrypting Computer Code, Not The Courts.**

If the California Supreme Court reverses the Bunner decision and ultimately agrees with Corley, one would then think that the issue of how to regulate decrypting computer code would be made clear as the

\textsuperscript{112} Id. (explaining the rationale behind the Bunner decision as DeCSS consisting of ideas relating to decrypting DVDs without regard to what the function of the code is).

\textsuperscript{113} Id. at 662 (explaining the court found that “DeCSS does not fall into any of these established exceptions: it is not lewd, profane, obscene, or libelous, nor did it involve any fighting words”). The court then went on and stated, “[a]lthough the social value of DeCSS may be questionable, it is nonetheless pure speech.” Id.

\textsuperscript{114} Bunner II, 117 Cal. Rptr. 2d at 167 (noting that Bunner is currently being reviewed by the California Supreme Court).

\textsuperscript{115} Corley, 273 F.3d at 460 (holding that the functional capability of DeCSS to decrypt does not constitute protected speech).

\textsuperscript{116} Henderson, supra n. 14, at 25 (comparing Corley and Bunner it is stated, “[b]ut neither decision helps to explain the tenuous segue between [C]onstitutionally protected speech and mechanical function”).

\textsuperscript{117} Id. at 24 (noting that “[a] program that scrambles computer code is mixing up more than just digital messages. It has lawyers wondering where the muddled line between free speech and intellectual property rights in cyberspace is going to be drawn next”).

\textsuperscript{118} Corley, 273 F.3d at 454 (holding that DeCSS’ functional capabilities do not merit First Amendment protection). Bunner, 93 Cal. App. 4th at 664 (holding that DeCSS is an expression of speech and thus protected under the First Amendment).

\textsuperscript{119} Beyond Napster, supra n. 5, at 421-22 (explaining that it is Congress who is best suited to handle the regulation of computer codes such as DeCSS).
two courts would then be in agreement.\textsuperscript{120} This will not be the case. The fact is that even with the injunctions placed on 2600.com, DeCSS is still readily available throughout the Internet.\textsuperscript{121} Congress needs to step forward and ultimately put this issue to rest.\textsuperscript{122} This would have the affect of avoiding future dilemmas\textsuperscript{123} such as those that DeCSS has caused.\textsuperscript{124}

Injunctions, such as those imposed by the Corley decision that supposedly deter Web sites from posting codes such as DeCSS, are not the answer. After the injunction was implemented against 2600.com, Web sites began mocking the Appellate Court’s decision by posting “mirrors”\textsuperscript{125} of DeCSS throughout the Internet. One Web site, www.freedvd.org,\textsuperscript{126} currently has 262 links to Web sites containing DeCSS mirrors along with numerous other links to Web sites containing mirrors that are listed as broken or semi-broken depending on their reliability.\textsuperscript{127} Those that post these mirrors know that they are partaking in illegal activity.\textsuperscript{128} On www.freedvd.org, there is a message acknowledging the possibility of legal action against the Web site.\textsuperscript{129} The site states that “it seems fairly unlikely that any law firm will ever be able to get rid of all these mirrors at this point.”\textsuperscript{130} The owner of the site then states that he would like someone to create mirrors of the mirrors to further

\textsuperscript{120} Corley, 273 F.3d at 454 (explaining that the Corley court found DeCSS in need of regulation).

\textsuperscript{121} Sarah H. McWane, Hollywood vs. Silicon Valley: DeCSS Down, Napster to Go?, 9 CommLaw Conspectus 87, 108-09 (2001). (quoting “the proliferation with which DeCSS has flourished over the Internet makes the [Corley] decision somewhat infeasible in reality. Even if 2600.com is banned from posting or linking to DeCSS . . . , DeCSS will continue to exist all over the Internet”).

\textsuperscript{122} Beyond Napster, supra n. 5, at 422 (explaining that the courts do not have the capability to adequately deal with issues such as regulating DeCSS).

\textsuperscript{123} Id. at 421-22 (explaining that Congress can “strike an appropriate balance” between regulating computer code and the freedom of speech).

\textsuperscript{124} Reimerdes 1, 82 F. Supp. 2d at 217 (holding that there is no significant purpose of DeCSS except to circumvent the protective CSS code).

\textsuperscript{125} DVD Report, MPAA Asks Judge to Forbid Building Links to DeCSS ¶ 2 (Phillips Bus. Info., Inc. Apr. 10, 2000) (noting [m]irrors, in relation to DeCSS, would be “other servers that offer the code”).

\textsuperscript{126} Visit Humpin! <http://www.freedvd.org.lu/mirror-list.html> (last updated Jan. 21, 2002) [hereinafter Visit Humpin!].

\textsuperscript{127} Id. § Current Mirrors.

\textsuperscript{128} Id. § Attention.

I’ve recently been informed that a law firm which is likely to be one that would try to get these mirrors taken down has been visiting this mirror site as well as others. With that said, there is a possibility that I may have to remove this site in the near future because like everyone else, I can’t afford to go to court to fight it.

\textsuperscript{129} Id. (explaining that a law firm has recently undertaken the task of attempting to ban the Web site from posting mirrors).

\textsuperscript{130} Id.
hamper the regulation of DeCSS. This mockery of the court system can be addressed by Congress if they enact a law that specifically regulates decrypting computer code. A law that would make codes created solely for the purpose of decrypting protected work illegal would save the courts the hassle of a case by case analysis dealing with such codes.

When Judge Kaplan wrote his opinions granting the injunctions in Reimerdes I and Reimerdes II, he knew that Congress should step forward and control computer code, as the courts do not have the means to do so. A court imposed injunction will stop some Web sites from distributing DeCSS. Congress, however, has the ability, through enacting the proposed legislation, to make such codes outright illegal thus eliminating the need for numerous injunctions. The history of the development of our nation’s technology shows that it is indeed Congress and not the courts who traditionally addresses copyright issues caused by new technologies. To keep pace with technological advances such as decrypting codes like DeCSS, Congress must continuously evolve the law.

When Congress passed the DMCA in 1998, it intended to bring copy-

131. Id. (quoting “[i]f anyone has the resources, it might be wise to mirror this list of mirrors as well so that the right people will still know that these mirrors exist”).

132. Beyond Napster, supra n. 5, at 422 (explaining that Congress has the authority and ability to regulate computer code while the courts are not equipped to do so because “they have little ability to ensure development of a full and fair record for the resolution of broad issues of public policy such as [the regulation of computer code]”).

133. Id.

It is Congress that is directly responsible to the people. It is Congress, the Supreme Court wrote in the Betamax case that is entitled to ‘consistent deference . . . when major technological developments alter the market for copyrighted material’ because ‘Congress has the Constitutional authority and the institutional ability to accommodate fully the varied permutations of competing interests that are inevitably implicated by such new technology.

134. Id. at 421-22 (explaining that courts are limited in their power while Congress has the means necessary to strike an appropriate balance).


Sound policy as well as history, supports our consistent deference to Congress when major technological innovations alter the market for copyrighted materials. Congress has the authority and the institutional ability to accommodate fully the varied permutations of competing interests that are inevitably implicated by such new technology.

136. Beyond Napster, supra n. 5, at 422 (explaining the rationale behind promoting Congress to act, Judge Kaplan stated, “those who are under the impression that the Internet is the new wild, wild West and that there is no law west of the Pecos have gotten quite a few shocks this year and they are bound to get more absent acquiescence in the rule of law”).
right legislation up to date with the advancing technological world. When looking at the DMCA, it seems that Congress did make decrypting codes such as DeCSS illegal. After all, DeCSS is a code that does exactly what the DMCA was set out to eliminate. DeCSS circumvents copyrighted DVDs by decrypting the protective CSS code. Circumvention is the decrypting of an encrypted work. As a computer code designed solely to decrypt CSS, one would think that DeCSS should be rendered illegal as it violates the DMCA. As the Corley and Bunner courts illustrate, however, this is not the case. On one hand there is the Corley court which found that DeCSS was being posted in violation of the DMCA and on the other hand there is the Bunner court which found that DeCSS was pure speech under the First Amendment and thus immune from regulation. If courts disagree on whether or not DeCSS is subject to regulation, then Congress should decide the issue. This would clear the ambiguity concerning whether a decrypting computer code like DeCSS, even when regarded as a form of speech, should be subject to regulation.

It is clear from the DMCA's plain language dealing with anti-circumvention measures that the legislature intended to regulate de-
vices that circumvent copyrighted material.\textsuperscript{146} As was shown through the \textit{Bunner} court, however, circumvention devices are being afforded some protection.\textsuperscript{147} Furthermore, even though the \textit{Corley} court enjoined a cease of posting and linking DeCSS, the code is still available on other Web sites.\textsuperscript{148} There are also sites that outright promote using DeCSS through t-shirts and other merchandise.\textsuperscript{149} On www.copyleft.net,\textsuperscript{150} there is DVD decryption merchandise that includes t-shirts, polo shirts, hats, ties, books, software, and stickers.\textsuperscript{151}

When enacting the DMCA, Congress did not use strong enough language making codes such as DeCSS illegal as is evidenced through the availability of the code throughout the Internet.\textsuperscript{152} A provision added to the DMCA dealing with this type of code will make sure that the First Amendment will not be used as a shield that will allow copyrighted material to be compromised.\textsuperscript{153} With added legislation dealing specifically with computer code, it will be easier to regulate the distribution and spread of decryption codes as these codes will be specifically addressed and appropriately dealt with by Congress.\textsuperscript{154}

\section*{C. Consequences of a Failure to Regulate Decrypting Code}

A major consequence that would result from the failure to regulate DeCSS is the impact that this failure would have on the motion picture

\textsuperscript{146} Aaron L. Melville, \textit{The Future of the Audio Home Recording Act of 1992: Has it Survived the Millennium Bug?}, 7 B.U. J. Sci. & Tech. L. 372, 388 (Summer 2001) (explaining that one of the reasons behind the enactment of the DMCA was to create a ban on all devices created to circumvent protected work).

\textsuperscript{147} \textit{Bunner}, 93 Cal. App. 4th at 662 (explaining that DeCSS is protected speech under the First Amendment).

\textsuperscript{148} \textit{Visit Humpin!}, supra n. 124, § Current Mirrors (noting [t]here are currently 262 links on this Web site that contain versions of DeCSS).


\textsuperscript{150} Id.

\textsuperscript{151} Id. (demonstrating the availability of merchandise promoting the use of decryption devices).


\textsuperscript{153} Reimerdes \textit{et al.}, 111 F. Supp. 2d at 304-05 (explaining why decrypting computer code should be subject to regulation and the First Amendment and should not be used as a shield of protection, Judge Kaplan explains, “computer code also is capable of inflicting other harm, society must be able to regulate the use and dissemination of code in appropriate circumstances”. “The Constitution, after all, is a framework for building a just and democratic society. It is not a suicide pact.” Id. (emphasis added).

\textsuperscript{154} Beyond Napster, supra n. 5, at 422 (explaining that Congress can address the issue of decrypting codes because “Congress is entitled to experiment and even make mistakes because it is best suited in dealing with this problem [of decrypting computer codes]”).
As previously stated, the motion picture studios stand to lose considerable amounts of money each year as a direct result of the pirating of their protected products. One might think that piracy does not have a negative affect on motion picture studios across America because of the popular belief that the movie business is "always profitable." This is not the case however. Only one out of every ten films released in the United States profits from revenue gained within the United States. Furthermore, four out of every ten films released never make a profit exceeding the original investment.

The piracy of protected material through the Internet is one of the largest hindrances to the digital economy as evidenced by the 350,000 movies that are illegally pirated every day. That number was projected to rise to one million per day by the end of the year 2001. If this pirating continues, DVD rental stores along with stores in the business of selling DVDs will suffer economic consequences. Without a regulation of codes such as DeCSS, computers and the Internet will continue to exploit protected work. This piracy will not only affect the entertainment industry but it will also have a direct negative affect on the nation's economy due to the fact that the movie industry plays a vital role in the preservation of our national economy.

Furthermore, codes such as DeCSS pose a threat to our national sec-

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155. Shockley, supra n. 9, at 277 (explaining that motion picture studios lose $2.5 billion annually as a result of piracy).  
157. Shockley, supra n. 9, at 277.  
158. Anti-Piracy, supra n. 33, § The Economic Picture (explaining that the motion picture studios suffer due to the piracy of their products which is contrary to the belief that the business of moviemaking is always profitable).  
159. Id. (explaining the profits that films generate in the countries that they are respectively released in).  
160. Id. (explaining that the movie industry is a risky business as four out of ten films released never profit beyond the original investment).  
162. Id. (explaining that by the end of the year the number of pirated movies will grow to one million per day).  
163. Danny Birchall, Thieves Like Us, Sight and Sound, Vol. 10, Issue 10 (Oct. 1, 2000) (noting that [w]hen a DVD is copied the copy and the original are identical). This results in the possibility of unlimited copies in mint condition. Id. The ensuing result will have a negative effect on the film industry. Id.  
164. Melville, supra n. 146, at 382 (explaining that the Internet, as it allows for the rapid transfer of protected works, is turning into "the world's biggest copying machine").  
165. Shockley, supra n. 9, at 277 (detailing that the motion picture industry is extremely important to the national economy as a whole).
It was pointed out by attorney Daniel Alter that DeCSS is similar to “software programs that shut down navigational programs in airplanes or smoke detectors in hotels. That software creates a very real possibility of harm.” If codes such as DeCSS go unregulated, severe economical damage along with possible threats to national security could arise.

D. PROPOSED AMENDMENT TO THE DMCA

A drastic overhaul of the DMCA is not necessary. An amendment, however, is crucial to the future of copyright law. The proposed amendment must make clear that it is computer code created solely for decrypting protected work and not computer code that serves beneficial purposes that needs to be regulated. The amendment must show that the First Amendment cannot be used as a shield that affords decrypting codes such as DeCSS Constitutional protection.

A proposed amendment would read:

No person shall circumvent a technological measure that effectively controls access to a work protected under this title through the means of computer code aimed at decrypting. Should such code as described be exercised, First Amendment freedom of speech protection will not be afforded to such code as it contains no social value and is in direct contradiction with this title.

The consequences of violating this amendment will be the same as those outlined in current copyright legislation under 17 U.S.C.S. sections 502, 504 and 506. The first remedy to be implemented will be an injunction placed on the use of the code, which would put an immediate stop to the damage being caused by the infringement. Next, those damaged by the infringement, in this case most notably the motion picture studios, will have the ability to seek actual damages suffered as a

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167. Id. (quoting Attorney Daniel Alter).
168. Corley, 273 F.3d at 448 (explaining that code can be beneficial to a programmer in educating the programmer on how to better instruct a computer to perform).
169. 1 U.S.C.S. § 1 (2002) (noting that for the purposes of the proposed legislation, the term person shall mean “corporations, companies, associations, firms, partnerships, societies, and joint stock companies, as well as individuals” as described in the General Provisions of the United States Code).
170. 17 U.S.C.S. 1201(a)(1)(A) (2001) (demonstrating that the language used is the same as that used in the DMCA in order to keep the statute congruent).
172. Id. § 502 (explaining the authority given to courts to grant injunctions barring copyright infringers from further infringements).
result of the infringing code.\textsuperscript{173} Furthermore, as piracy constitutes the theft of property,\textsuperscript{174} violation of the amendment could result in imprisonment for up to six years.\textsuperscript{175}

The enforcement of this amendment would come through the aid of Internet service providers\textsuperscript{176} who could monitor the content that their subscribers\textsuperscript{177} and then report such computer code violations to the government. One might argue that this would place too great a burden on Internet service providers.\textsuperscript{178} This type of enforcement, however, is realistic as it has been effective in countries such as Germany and Singapore.\textsuperscript{179} In Germany, for example, Internet service providers, through the aide of the government, control the content displayed on Web sites in promotion of Germany’s no tolerance stance on pornography and Nazi propaganda.\textsuperscript{180}

E. THE FIRST AMENDMENT O’BRIEN TEST APPLIED TO THE PROPOSED AMENDMENT

In order for the proposed amendment regulating content-neutral computer code to survive a test of Constitutionality, it must pass the same O’Brien test that the court in Corley applied to the DMCA.\textsuperscript{181} A demonstration showing that the proposed amendment passes the

\textsuperscript{173} Id. § 504 (explaining the ability of damages to be awarded as a result of copyright infringement).


\textsuperscript{175} Id. (explaining that copyright infringement can result in imprisonment up to six years).

\textsuperscript{176} 17 U.S.C.S. § 512(k) (2002). An Internet service provider is defined by statute as: an entity offering the transmission, routing, or providing of connections for digital online communications, between or among points specified by a user, of material of the user’s choosing, without modification to the content of the material as sent or received . . . a provider of online services or network access, or the operator of facilities therefor . . .

\textsuperscript{177} Steven M. Hanley, \textit{International Internet Regulation: A Multinational Approach}, 16 John Marshall J. Computer & Info. L. 997, 1008 (Summer 1998) (explaining that Internet service providers could “monitor their subscribers network functioning as . . . gatekeeper[s]”).

\textsuperscript{178} Id. (explaining that making Internet service providers liable for content constitutes an unnecessary burden on the Internet service providers).

\textsuperscript{179} Id. at 1004, 1006 (demonstrating the successes that Germany and Singapore have had in regulating certain Internet information through the use of Internet service providers).

\textsuperscript{180} Id. at 1004 (stating “[t]he German government has taken a ‘no toleration’ approach to the Internet by forcing ISPs to block [W]eb sites displaying pornography or Nazi propaganda”).

\textsuperscript{181} Corley, 273 F.3d at 442 (explaining that since the DMCA seeks to regulate content-neutral expression it is thus subject to the O’Brien test).
The first element of the test is that such regulation must be within the Constitutional power of the federal government. As proposed, this amendment will be an addition to current copyright law. The United States Constitution has granted Congress the authority to provide the American people with copyright protection. The Constitution's necessary and proper clause grants Congress further permission to execute its authority in protecting copyright holders. Thus, since the United States Congress is charged with protecting copyrights, it has the authority to enact legislation it deems necessary and proper in protecting these copyrights.

The proposed amendment will protect copyright holders, such as the motion picture studios across the nation, by making codes such as DeCSS, which decrypt protected work, illegal. By having their products protected from codes such as DeCSS, motion picture studios and individual artists will have the freedom to promote their work and to make their work available to the public without the fear of having it pirated and bootlegged.

The second element under the O'Brien test that the proposed amendment must pass is that it must be enacted to further an "important or substantial government interest." Protecting new media from the potential of piracy constitutes a substantial government interest. The United States government has recognized the importance of protecting filmmakers and the devices that they avail their creative work on. By enacting the proposed amendment, which would give copyright hold-

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182. Rotunda & Nowak, supra n. 97, at 640 (demonstrating the first element of the O'Brien test as showing that the regulation is within the government's power).
183. U.S. Const. art. I, § 8(h) (quoting "[t]he Congress shall have power, . . . to promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries").
184. Id. § 8(r).
185. Id. (explaining that Congress may create laws necessary for the carrying out of their prescribed powers).
186. Id.
187. Nicholas Imparato, The Great Chess Game: Business Leaders Need to be Involved in the Legislation and Policy Debates for Copyright; Business Impact, Intelligent Enterprise, No. 18, Vol. 4, p. 18 (Dec. 5, 2001) (explaining that without proper protections in place, the incentive to create new work is lost).
188. Rotunda & Nowak, supra n. 97, at 640-41 (showing that the promotion of a substantial government interest is crucial when enacting a law that regulates content-neutral expression).
189. Reimerdes II, 111 F. Supp. 2d at 330 (explaining that granting protection to copyrighted works furthers substantial government interest).
190. 134 Cong. Rec. S11994 (daily ed. Sep. 8, 1988). In debating the National Film Preservation Act of 1988, it was made clear that Congress recognized that "it is appropriate
ers protection against decrypting devices such as DeCSS along with relief when their rights are violated, the government will be furthering its interests.\footnote{Hon. Marybeth Peters, Sen. Jud. Comm., Intellectual Property Protection, Fed. Doc. Clearing H. Cong. Test. (Feb. 27, 2002).} The government's interests will also be furthered by enacting this amendment because protecting copyright holders from piracy will directly bolster our national economy.\footnote{Id. (explaining that by not protecting a copyright holder's protected work, the incentive to create will weaken which will directly affect the American economy).} The protection and advancement of the national economy constitutes a substantial governmental interest.\footnote{Arthur R. Pinto, The Third Abraham L. Pomerantz Lecture the First Amendment and Government Regulation of Economic Markets: The Nature of the Capital Markets Allows a Greater Role for the Government, 55 Brook. L. Rev. 77, n. 84 (Winter 1989) (explaining that when harmful consequences to the economy occur, addressing these consequences advances a substantial governmental interest).}

The third element of the \textit{O'Brien} test is that the governmental interest promoted by the enactment of the amendment must be unrelated to suppressing free expression.\footnote{Rotunda & Nowak, \textit{supra} n. 97, at 640-41 (explaining that the government may not enact a law that is intended to suppress free expression).} This proposed amendment is aimed at regulating the functional aspect of what computer codes such as DeCSS do, not the expressive aspect. Congress has the authority to regulate such functional aspects.\footnote{Reimerdes II, 111 F. Supp. 2d at 329.} Furthermore, the regulating of a decrypting code's functioning ability does not infringe on the expressive aspect of the code.\footnote{Any impact on the dissemination of programmers' ideas is purely incidental to the overriding concerns of promoting the distribution of copyrighted works in digital form while at the same time protecting those works from piracy and other violations of the exclusive rights of copyright holders.}

The fourth and final element that the proposed amendment must satisfy is that the restriction placed on computer code cannot be greater than is essential in promoting the government's interest.\footnote{Mark Hamblett, \textit{Movie Studios Score DVD Piracy Victory}, The Legal Intelligencer 4 (Aug. 21, 2000) (explaining Judge Kaplan's opinion that Congress can regulate content-neutral aspects of computer code and this type of regulation does not suppress free expression).} The proposed amendment's goal is to restrict the use of decrypting computer codes thus deterring the piracy of protected work. Such a restriction may have minute incidental effects on free expression but these effects

\textit{Id.}
will be tolerated as merely consequential.\textsuperscript{198}

As has been demonstrated, the proposed amendment satisfies the four requirements necessary to pass the \textit{O'Brien} test. Thus, it is Constitutional as a legitimate regulation on expression.

IV. CONCLUSION

Computer code directed at circumventing and decrypting protected work needs to be controlled. If it is not, the future for those seeking copyright protection is very bleak. The incentive to create new technology, just as the DVD was created in 1994, will diminish if those who create such devices cannot protect their work.\textsuperscript{199} Why would one go through the trouble if his or her work can be compromised by a decrypting computer code protected by the First Amendment?\textsuperscript{200}

It has been shown that codes such as DeCSS were never meant to be protected under the First Amendment.\textsuperscript{201} Courts seem to be leaning towards regulating decrypting codes; but, as was pointed out by Judge Kaplan and through viewing the history of copyright law, it is Congress who should step forward and address the problem before it gets too out of hand.\textsuperscript{202} Such legislation as was proposed will only benefit our economy and our national security as a whole. Should Congress act on this issue, future dilemmas such as the one caused by the distribution of DeCSS can and will be avoided. Our nation's technology is constantly changing and so must the law.

\textit{Luke Antonsen}\textsuperscript{†}

\textsuperscript{198} \textit{Reimerdes II}, 111 F. Supp. 2d at 330 (explaining that the incidental restraints placed on expression does not over-step Congress' authority nor is the restriction greater than the interests promoted through regulating computer code).

\textsuperscript{199} \textit{Pressman}, supra n. 10, at 18 (demonstrating the negative affect that piracy has on the incentive to create new work).

\textsuperscript{200} \textit{Computimes: The Bandwagon Plays on - Litigation Shows Online Providers Won't be Replacing the Record Companies Just Yet, Says Denis Kelleher}, The Irish Times, p. 8 (July 17, 2000) (explaining that a direct consequence of DVD piracy is the fact that the industries have become skeptical of selling their products on the DVD medium).

\textsuperscript{201} \textit{Corley}, 273 F.3d at 452-53 (explaining that the main function of DeCSS is to unlawfully decrypt protected work and thus First Amendment protection will be limited).

\textsuperscript{202} \textit{Beyond Napster}, supra n. 5, at 422 (explaining that as codes such as DeCSS continue to cause problems in the world of copyright protection, it is Congress that must accommodate those being harmed).

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