LEGAL UPDATE

THE FIRST AMENDMENT AND DECSS

Brian R. Chase[*]

I. INTRODUCTION

The California Supreme Court recently granted review on the decision in *DVD Copy Control Association v. Bunner*.[1] Five of the six justices voted to hear the case. The main issue of this review will involve the question whether DeCSS, a program used for decrypting DVD's encryption protection, should be considered "pure speech" as held by the California Court of Appeals, or if it contains separate speech and non-speech components as held by the Second Circuit.

"Digital Versatile Discs" or "DVDs" are optical media storage devices used to contain movies.[2] DVDs are similar to CDs but contain about seven times more data.[3] Data is stored on DVDs as small pits and bumps in the tracks of the disc which are read by the laser of a DVD player.[4] Movie data is stored on the DVD in digital form.[5] The movie industry was reluctant to release movies in digital form for fear of piracy. Unlike copies of analog storage devices, such as video cassettes, copies of digital media are virtually perfect.[6] It wasn't until adequate safeguards were in place that studios began releasing their movies in DVD format. Because the industry wanted an encryption technology to prevent consumers from making copies, members of the consumer electronics and computer industries created the Content Scrambling System ("CSS"), an encryption system that uses an algorithm configured by "keys" to encrypt a DVD.[7] CSS is composed of primarily the algorithm and 400 "master keys."[8] Every CSS-encrypted DVD contains all 400 "keys."[9] To

---

[*] J.D. candidate, Boston University School of Law 2003; B.S., University of Utah, 1999.

[1] DVD Copy Control Ass'n v. Bunner, 113 Cal. Rptr. 2d 338 (Cal. Ct. of App. 6 Dist. 2001), *review granted* No. S102588, (Cal. Feb. 20, 2002).

[2] *See* Universal City Studios, Inc. v. Corley, 273 F.3d 429, 435 (2nd Cir. 2001).

[3] Karim Nice, *How DVDs and DVD Players Work,* HOW STUFF WORKS.COM, *at* http://www.howstuffworks.com/dvd1.htm (last visited Apr. 1, 2002).

[4] Karim Nice, *How DVDs and DVD Players Work,* HOWSTUFFWORKS.COM, *at* http://www.howstuffworks.com/dvd2.htm (last visited Apr. 1, 2002).

[5] *See Corley*, 273 F.3d at 436.

[6] *See id.*

[7] *See id.*

[8] *See* DVD Copy Control Ass'n v. Bunner, 113 Cal. Rptr. 2d 338, 340 (Cal. Ct. App. 6 Dist. 2001).

decrypt these keys, a DVD player must contain a set of "player keys" and the algorithm.[10] With the "player keys" a DVD player can display a movie on a television or computer screen but does not permit the movie to be manipulated or copied. The DVD Copy Control Association ("DVD CCA")[11] controls the rights to CSS and licenses the CSS decryption technology to manufacturers of hardware and software for playing DVD's.[12] Each licensee is assigned one or more master keys.[13] In exchange, manufacturers are obliged to keep the player keys confidential and to prevent the transmission of "CSS data" from a DVD drive to any "internal recording device."

In 1999, Jon Johansen, a 15-year old Norwegian teenager, allegedly reverse-engineered a licensed DVD-player to determine the player keys and other information necessary for decrypting CSS.[14] Using this information, Johansen wrote a decryption program called "DeCSS" that worked with Microsoft's operating system.[15] Using the DeCSS program with a DVD in the computer's disk drive will decrypt the CSS protection and will permit the user to copy the files from the DVD to the computer hard drive. Johansen published the executable object code, not the source code, on his Web site.[16] Shortly after, "DeCSS was widely available on the Internet, in both object code and in various forms of source code."[17]

In response to this increased access to DeCSS, cases about whether posting DeCSS on the Internet is permissible have begun to pop up around the country.[18] Before addressing these cases and their holdings it is important to understand laws which have been used in this debate.

---

[9] *See id.*

[10] *See Corley,* 273 F.3d at 436-37.

[11] *See* DVD Copy Control Organization, *at* http://www.dvdcca.org (last visited Apr. 1, 2002). The DVDCCA notes that:

The DVD Copy Control Association (DVD CCA) is a not-for-profit corporation with responsibility for licensing CSS (Content Scramble System) to manufacturers of DVD hardware, discs and related products. Licensees include the owners and manufacturers of the content of DVD discs; creators of encryption engines, hardware and software decrypters; and manufacturers of DVD Players and DVD-ROM drives.

DVD Copy Control Association, *Frequently Asked Questions, at* http://www.dvdcca.org/faq.html (last visited Apr. 1, 2002).

[12] *See Bunner*, 113 Cal. Rptr. 2d at 340-41.

[13] *See id.*

[14] *See id.* at 341.

[15] *See* id.

[16] *See Corley,* 273 F.3d at 438-39. "Object code" consists of binary data, 1's and 0's, which a computer can read. While object code is useful, it is very inefficient and can be virtually impossible to read by others. Computer languages have been written for the purpose of program writing and reading. A program in these languages is written in what is called "source code." Source code is generally easier to read than object code but in most cases, has to be translated back to object code for a computer to understand it. See id.

[17] *Id*. at 439.

[18] *See e.g., Corley*, 273 F.3d at 429; *Bunner* 113 Cal. Rptr. 2d at 338; Pavlovich v.

II. THE LAWS

A.   *First Amendment of the United States Constitution*

The First Amendment states that "Congress shall make no law . . . abridging the freedom of speech."[19] To obtain First Amendment protection, the behavior must fall under the category of speech. Speech constitutes a "wide range of expression," from pure entertainment to political speech.[20] However, First Amendment protection is not without limits. There are certain limited classes of speech which have never been thought to raise any constitutional problems.[21] One scholar writes that "content-based restrictions restrict communication because of the message conveyed . . . Content-neutral restrictions, on the other hand, restrict communication without regard to the message conveyed."[22] There is also a distinction between content-neutral and content-based restrictions.[23] Whether other laws restrict a person's freedom of speech depends on the nature of that law.

B.   *Uniform Trade Secrets Act*

Approximately forty states have enacted a version of the Uniform Trade Secrets Act ("UTSA") to protect valuable trade secrets.[24] Under the California Civil Code, a trade secret is misappropriated if a person:

> (1) acquires a trade secret knowing or having reason to know that the trade secret has been acquired by 'improper means,' (2) discloses or uses a trade secret the person has acquired by "improper means" or in violation of a nondisclosure obligation, (3) discloses or uses a trade secret the person knew or should have known was derived from another who acquired it by improper means or who had a nondisclosure obligation or

---

Superior Court, 109 Cal. Rptr. 2d 909 (Cal. Ct. App. 6. Dist. 2001).

[19] U.S. CONST. amend. I.

[20] See *Bunner*, 113 Cal. Rptr. 2d at 348 (citing Schad v. Mount Ephraim, 452 U.S. 61, 65 (1981)).

[21] See id. at 348-49.

[22] Geoffrey R. Stone, et al., Constitutional Law 1086-87 (3d ed. 1996).

[23] "Content-based restrictions are permissible only if they serve compelling state interests and do so by the least restrictive means available." *Corley*, 273 F.3d at 450 (citing Sable Communications of California, Inc. v. FCC, 492 U.S. 115, 126 (1989)).

> A content-neutral restriction [on speech] is permissible if it serves a substantial governmental interest, the interest is unrelated to the suppression of free expression, and the regulation is narrowly tailored, which 'in this context requires . . . that the means chosen do not "burden substantially more speech than is necessary to further the government's legitimate interests.'

Id. at 450 (citing Turner Broadcasting System, Inc. v. FCC, 512 U.S. 622, 662 (1994)).

[24] ROBERT P. MERGES, ET AL., INTELLECTUAL PROPERTY IN THE NEW TECHNOLOGICAL AGE 34 (2d. ed. 2000).

(4) discloses or uses a trade secret after learning that it is a trade secret but before a material change of position.[25]

The UTSA expressly states that "reverse engineering or independent derivation alone shall not be considered improper means."[26] The UTSA as adopted in California "allows for injunctive relief against 'actual or threatened misappropriation'" of a trade secret.[27] Computer software can qualify for trade secret protection under the UTSA; however, a plaintiff claiming trade secret misappropriation must identify the trade secrets and must carry the burden of proving that the trade secrets exist.[28]

C. The Digital Millennium Copyright Act

The Digital Millennium Copyright Act ("DMCA") was adopted in 1998 to bring U.S. copyright law into the digital age in compliance with international treaties.[29] The DMCA permits copyright holders to create technological measures on DVDs which will prevent consumers from copying the information on the DVDs onto their computers and other devices.[30]

In the late 1980's, a concern grew involving new products which enabled consumers (and pirates) to reproduce and distribute exact replicas of works at little or no cost.[31] The music and movie industries feared that digital recording would reduce their revenues.[32] Congress first attempted to address this concern with respect to devices designed primarily to make digital musical recordings (e.g. Digital Audio Tapes and Digital Mini Discs) when it adopted the Audio Home Recording Act of 1992 ("AHRA").[33] The AHRA created a new set of restrictions, rights to compensation and immunities significantly

---

[25] *See Bunner*, 113 Cal. Rptr. 2d at 346.

[26] *Id.*

[27] *Id.*

[28] *See id.*

[29] *See* 17 U.S.C. §§ 512, 1201 et seq. (2000). The DMCA was enacted to implement the World Intellectual Property Organization Copyright Treaty ("WIPO Treaty"). WIPO requires that contracting parties

provide adequate legal protection and effective legal remedies against the circumvention of effective technological measures that are used by authors in connection with the exercise of their rights under this Treaty or the Berne Convention and that restrict acts, in respect of their works, which are not authorized by the authors concerned or permitted by law.

Universal City Studios, Inc. v. Corley, 273 F.3d 429, 440 (2d Cir. 2001) (citing WIPO Treaty, Apr. 12, 1997, art. 11, S. Treaty Doc. No. 105-17 (1997), *available at* 1997 WL 447232).

[30] *See* 17 U.S.C. § 1201 (2000).

[31] David Nimmer, *A Riff on Fair Use in the Digital Millennium Copyright Act*, 148 U. PA. L. REV. 673, 683-84 (2000).

[32] *See* MERGES ET AL., *supra* note 22, at 488.

[33] Pub. L. No. 102-563, 106 Stat. 4237 (codified as amended at 17 U.S.C. §§ 1001-1010 (2000)).

broader than traditional copyright.[34] These restrictions do not apply to consumers.[35] More importantly, the AHRA does not apply to multipurpose devices like a CD-ROMs, DVD-ROMs or personal computer. To address the gap surrounding DVD-ROMs left by the AHRA, the DMCA prohibits the circumvention of these copy protection systems and the removal of copyright management information attached to the copyrighted work.[36]

Section 1201 of the DMCA defines three separate types of anti-circumvention violations: a basic provision, a ban on trafficking, and "additional violations."[37] The basic provision provides that "[n]o person shall circumvent a technological measure that effectively controls access to a work protected under this title."[38] The ban on trafficking provision states that

> [n]o person shall manufacture, import, offer to the public, provide, or otherwise traffic in any technology, product, service, device, component, or part thereof [if it] is primarily designed or produced for the purpose of circumventing protection afforded by a technological measure . . . [or] has only limited commercially significant purpose or use other than to circumvent protection afforded by a technological measure . . . [or] 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.[39]

Section 1201 does not itself protect copyrighted materials but instead it protects the technological means copyright holders use to protect their materials.[40]

The DMCA is subject to seven specific exceptions[41] for: 1) for nonprofit libraries, archives, and educational institutions, 2) law enforcement, intelligence, and other government activities, 3) reverse engineering, 4) encryption research, 5) preventing minors access to certain materials on the Internet, 6) protection of personally identifying information, and 7) security testing. These exemptions are limiting and courts may be forced to find

---

[34] *Id.* Manufacturers of devices covered by the AHRA must:

(1) register with the Copyright Office; (2) pay a statutory royalty on each device and piece of media sold; and (3) implement serial copyright management technology (such as SCMS) which prevents the production of copies of copies. In exchange for this, manufacturers of the devices receive statutory immunity from infringement based on the use of those devices by consumers.

Recording Industry Association of America, *What is Copyright*, *at* http://www.riaa.org/Copyright-Laws-4.cfm (last visited Apr. 1, 2002).

[35] *See* Recording Industry Association of America, *What is Copyright*, *at* http://www.riaa.org/Copyright-Laws-4.cfm (last visited Apr. 1. 2002).

[36] *See id.*

[37] *See* 17 U.S.C. §§ 1201(a)(1)(A), (a)(2), (b)(1) (2000).

[38] *Id.* § 1201(a)(1)(A).

[39] 17 U.S.C. §§ 1201(a)(2)(A), (b)(1)(A)-(C).

[40] *See id.* § 1201.

[41] *See id.* § 1201(d)-(j).

liability in some situations where it is inappropriate or to stretch the limitations.[42]

III. THE CASES

Whether publication of DeCSS on Internet Web sites is legal pursuant to the First Amendment of the United States Constitution is currently being determined. This issue has arisen recently in two cases: *Universal City Studios, Inc. v. Corley*, in the United States Court of Appeals, Second Circuit,[43] and *DVD Copy Control Association v. Bunner* in the Court of Appeal of California, Sixth District.[44] It is important to note that at the time of this legal update, the California decision has been depublished subject to review by the Supreme Court of California.[45]

A.   *DVD Copy Control Association v. Bunner*

Soon after Jon Johansen posted DeCSS on the Internet, Andrew Bunner allegedly posted it on his Web site.[46] On December 27, 1999, DVD Copy Control Association ("DVDCCA") brought an action under the Uniform Trade Secrets Act against Bunner and several other defendants who had also allegedly published or linked to DeCSS.[47] DVDCCA alleged that the defendants were "misusing proprietary confidential information gained through improper means."[48] DVDCCA sought an injunction to prevent any disclosures of DeCSS. In defense, Bunner argued that there was no evidence that he "knew or should have known that DeCSS had been created by improper use of any proprietary information."[49] In addition, he argued that Johansen reverse engineered CSS to create DeCSS. Reverse engineering is not an "improper means" within the meaning of the UTSA.[50] Bunner argued also that injunctive relief would violate his First Amendment rights.[51] The California Court of Appeal assumed the trial court correctly concluded that DVDCCA had

[42] Pamela Samuelson, *Intellectual Property and the Digital Economy: Why the Anti-Circumvention Regulations Need to be Revised*, 14 BERKELEY TECH. L. J. 519, 533-34 (1999).

[43] Universal City Studios, Inc. v. Corley, 273 F.3d 429 (2nd Cir. 2001). This case is an appeal from the amended final judgment of the United States District Court for the Southern District of New York in *Universal City Studios, Inc. v. Reimerdes*, 111 F. Supp. 2d 346 (S.D.N.Y. 2000), which enjoined the appellants from posting DeCSS on their Web site.

[44] DVD Copy Control Ass'n v. Bunner, 113 Cal. Rptr. 2d 338 (Cal. Ct. of App. 6 Dist. 2001).

[45] DVD Copy Control Ass'n v. Bunner, 2002 Cal. LEXIS 614; 2002 Cal. Daily Op. Service 1635 (Cal. Feb. 20 2002).

[46] *See Bunner*, 113 Cal. Rptr. 2d at 341.

[47] *See id.*

[48] *Id.*

[49] *Id.* at 343.

[50] *See id.* at 346 (citing Cal. Civ. Code §3426.1, subd. (a) (2002)).

[51] *See id.* at 343.

established a "reasonable probability" that it could prove that Bunner had "actual or constructive knowledge that DeCSS had been created by improper means."[52]

The Court then addressed whether the preliminary injunction violated Bunner's First Amendment rights because it constituted a prior restraint on his freedom of speech.[53] The Court held that an injunction barring Bunner from disclosing DeCSS could be characterized as a prohibition of "pure" speech.[54] According to the Court, DeCSS is a writing composed of computer source code which describes a method of decrypting CSS.[55] The Court concluded that "DeCSS is a written expression of the author's ideas and information about decryption of DVDs without CSS."[56] Defined as "pure speech," the court concluded that Bunner's republication of the source code of DeCSS was within the scope of the First Amendment.[57] In response to DVDCCA's argument that courts "routinely" enjoined trade secret misappropriation, even over a First Amendment defense, the court held that trade secret law's protection of trade secrets does not override the First Amendment protection.[58]

Since the First Amendment prohibits any law "abridging the freedom of speech,"[59] the Court concluded that a preliminary injunction would be a prior restraint on Bunner's First Amendment right to publish DeCSS and was presumptively unconstitutional.[60] DVDCCA's interest in protecting its trade secret was not "more fundamental" than the First Amendment right to freedom of speech.

B.   *Universal City Studios, Inc. v. Corley*

Within three weeks of the *Bunner* decision in California, *Universal City Studios, Inc. v. Corley* was decided in the United States Court of Appeals for the Second Circuit.[61] Though the facts were generally the same, the legal arguments were different as was the outcome. Instead of bringing a suit under trade secret law, Universal City Studios sought injunctive relief under the Digital Millennium Copyright Act. In response, Corley argued that the DMCA violates the First Amendment.

In November 1999, Corley posted a copy of DeCSS on his Web site.[62] He

---

[52] *Id*. at 346-47.

[53] *See id.* at 347.

[54] *See id.* at 348.

[55] *See id.*

[56] *Id.*

[57] *See id.* at 350.

[58] *See id.* at 349.

[59] *Id;* U.S. CONST. amend. I.

[60] *See id.* at 350-51. The court did not determine whether a permanent injunction would be permissible. *See id.* at 352 n.9.

[61] 273 F.3d 429 (2d Cir. 2001).

[62] *See id.* at 439.

also supplied links to other Web sites which posted DeCSS.[63] In January 2000, the District Court issued a preliminary injunction barring Defendants from posting DeCSS.[64] Corley and associates complied with this injunction but continued to post links to the other Web sites.[65] The District Court, after a trial on the merits, granted a permanent injunction to both the posting of DeCSS on Corley's Web site as well as to the linking of other sites.[66] The Court found that Corley's posting of DeCSS fell within the anti-circumvention provision of the DMCA. The District Court held that DeCSS is "speech" protected by the First Amendment but because the DMCA targeted the "functional" aspect of that speech, it is "content neutral" and only intermediate scrutiny is applicable.[67] "The [District] Court concluded that the DMCA survives this scrutiny, and also rejected prior restraint, overbreadth, and vagueness challenges."[68]

On appeal, the Second Circuit affirmed the injunction. The anti-trafficking provisions and anti-circumvention provisions of the DMCA applied to Corley's behavior.[69] The appellate court then moved onto the Constitutional claims. The court held that the computer code used in DeCSS was speech protected by the First Amendment.[70] The court explained that just because computer program instructions require use of a computer does not exempt them from the category of the First Amendment.[71] The conveyance of information by the computer program "renders instructions 'speech' for purposes of the First Amendment."[72] The Court feared that limiting the First Amendment protection of programmers to the descriptions of computer codes could impede communication and development among computer scholars.[73] Instructions that communicate intelligible information, even if just to computer programmers, "qualify as speech whether the instructions are designed for execution by a computer or a human."[74] Though the court did hold that computer programs qualify as speech and are therefore protected by the First Amendment, the court further held that DeCSS contains both a speech and a functional, non-speech component.[75]

The scope of protection granted by the First Amendment depends on whether the speech can be restricted because of its content. Functionality of a

---

[63] *See id.*

[64] *See id.* at 441.

[65] *See id.*

[66] *See id.*

[67] *See id.* at 442.

[68] *Id.* (citations omitted).

[69] *See id.* at 444.

[70] *See id.* at 445-49.

[71] *See id.* at 447 .

[72] *Id.*

[73] *Id.* at 448.

[74] *Id.*

[75] *See id.* at 454.

computer code affects that scope because "functional capability is not speech within the meaning of the First Amendment."[76]   The appellate court held, because the functional non-speech aspect of DeCSS was targeted by the DMCA, it was content-neutral and survived intermediate scrutiny. The court reasoned that "[t]he 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."[77] The appellate court also addressed the capacity of DeCSS to accomplish unlawful things; this ability limited the scope of First Amendment protection.[78]

In addressing linking, the court noted that "hyperlinks"[79] also contained a speech and non-speech component. The court affirmed the District Court's holding that to find Corley liable under the DMCA required clear and convincing evidence that Corley and his associates knew these links were connected to unlawful and offending technology and that they intended to create this link for the purpose of disseminating that technology.[80]

IV. CONCLUSION

It is now up to the California Supreme Court to determine whether DeCSS should be considered "pure speech" that is protected by the First Amendment or whether it consists merely of functional elements that are not protected. It is likely that the California Supreme Court will choose to follow the lead of the Second Circuit in construing DeCSS to have both a speech and a non-speech component. If so, the California Supreme Court could issue an injunction against Bunner citing that the non-functional elements of DeCSS were not protected by the First Amendment and therefore were misappropriated trade secrets.

---

[76] *Id.*

[77] *Id*

[78] *See id.*

[79] "A hyperlink is a cross-reference . . . appearing on one web page that, when activated by the point-and-click of a mouse, brings onto the computer screen another web page." *Id.* at 455.

[80] *See id.* at 456.