CRS Report for Congress

The Digital Millennium Copyright Act: Exemptions to the Prohibition on Circumvention

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Summary

Congress passed the Digital Millennium Copyright Act (DMCA) in 1998, in part, to help copyright owners protect their exclusive rights against infringement facilitated by digital technologies, including the Internet. Section 1201 of the DMCA outlaws circumvention of any access control devices, such as password codes, encryption, and scrambling, that copyright owners may use to protect copyrighted works. The DMCA's prohibition on circumvention is not absolute, however. In addition to several statutory exceptions to the general anti-circumvention provision, the DMCA authorizes the Librarian of Congress, upon the recommendation of the Register of Copyrights, to grant temporary exemptions in order to ensure that the public may use certain copyrighted works in non-infringing ways, including engaging in "fair use" of such works.

Exemptions to the prohibition on circumvention of access controls are granted every three years, following a notice-and-comment rulemaking proceeding that the Register of Copyrights conducts. As a result of the most recent Copyright Office rulemaking proceeding, the Librarian of Congress recognized six new exemptions on November 27, 2006. These are effective until October 27, 2009, and permit the circumvention of access control devices, under specified circumstances, in order to (1) make compilations of video clips for film and media studies courses; (2) archive obsolete computer programs or games; (3) bypass "dongles," or hardware locks, that are obsolete; (4) use read-aloud functions or screen readers with e-books; (5) connect wireless telephone handsets to communication networks; and (6) test for or correct security flaws in works distributed on compact discs.

This report reviews the statutory basis for the triennial exemptions, explains the Copyright Office's rulemaking process pursuant to the DMCA, summarizes the exemptions granted and rejected in 2006, and describes public reactions to the 2006 exemptions.

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Introduction

On November 27, 2006, the Librarian of Congress announced six exemptions to the Digital Millennium Copyright Act's (DMCA's) prohibition on circumvention of technological measures controlling access to copyrighted works. These exemptions allow users of copyrighted works to circumvent access control devices, under certain specified conditions, during the next three years, in order to (1) make compilations of video clips for film and media studies courses; (2) archive obsolete computer programs or games; (3) bypass "dongles," or hardware locks, that are obsolete; (4) use read-aloud functions or screen readers with e-books; (5) connect wireless telephone handsets to communication networks; and (6) test for or correct security flaws in works distributed on compact discs.[1] This report describes the statutory basis for the exemptions, the triennial rulemaking proceeding that results in them, and the exemptions granted in 2006.

Background

The Digital Millennium Copyright Act. Copyright is a protection provided by U.S. law[2] to literary, musical, dramatic, artistic, and other works that are original and fixed in a tangible medium of expression.[3] The authors of copyrighted works, or those to whom they transfer their copyrights, have the exclusive rights to reproduce, distribute, and publicly perform or display the works, and to prepare derivative works based upon them.[4] Congress passed the Digital Millennium Copyright Act (P.L. 105-304) in 1998, in part, to help copyright owners protect their exclusive rights against infringement facilitated by digital technologies, including the

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[1] Exemption to the Prohibition on Circumvention of Copyright Protection Systems for Access Controls (hereinafter "1201(a)(1) Exemptions"), 70 Fed. Reg. 68,472, 68,473-77 (Nov. 27, 2006), available on Feb. 2, 2007, at [http://www.copyright.gov/fedreg/2006/71fr68472.html] (amending 37 C.F.R. § 201.40).

[2] The source of federal copyright law originates with the Copyright and Patent Clause of the U.S. Constitution, which authorizes Congress "[t]o promote the Progress of Science ... by securing for limited Times to Authors ... the exclusive Right to their ... Writings." U.S. CONST. art. I, § 8, cl. 8.

[3] 17 U.S.C. § 102(a). A work is sufficiently "original" for copyright protection if it is independently created by its author and possesses a minimal degree of creativity. *See* Feist Pubs., Inc. v. Rural Tel. Serv. Co., 499 U.S. 340, 345 (1991).

[4] 17 U.S.C. § 106.

Internet.[5] Section 1201 of the DMCA outlaws circumvention of any access control devices, such as password codes, encryption, and scrambling, that copyright owners may use to protect copyrighted works.[6] The DMCA's prohibition on circumvention extends to both the act of circumventing access control devices and trafficking in devices that may be used for this purpose.[7]

The DMCA's prohibition on circumvention is not absolute, however. Much like the way in which the Copyright Act limits copyright owners' exclusive rights with the doctrine of fair use,[8] the DMCA allows for circumvention in certain limited circumstances.[9] First, the DMCA includes statutory exceptions, providing that circumvention is not unlawful when —

- a library, archive, or educational institution accesses a commercial work only to make a decision about purchasing that work;[10]

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[5] The DMCA was shaped both by congressional deliberations about Internet copyright policy and by U.S. ratification of the World Intellectual Property Organization (WIPO) Copyright Treaty and the WIPO Performances and Phonograms Treaty. *See* CRS Report 98-943, *Digital Millennium Copyright Act, P.L. 105-304: Summary and Analysis*, by Dorothy M. Schrader.

[6] 17 U.S.C. § 1201(a)(1)(A) ("No person shall circumvent a technological measure that effectively controls access to a work protected under this title."). This one sentence originally comprised the entirety of § 1201(a)(1) in the House Judiciary Committee's draft DMCA bill. However, the House Commerce Committee was concerned that this provision could undermine fair use and so added what is currently 17 U.S.C. §§ 1201(a)(1)(B)-(C), allowing temporary exemptions to be created by rulemaking. *See* H.Rept. 105-551, pt. 2, at 35 (1998).

[7] 17 U.S.C. §§ 1201(a)(1)-(2) and § 1201(b). A violation of the DMCA's anti-trafficking provision may extend to publication or dissemination of information about how to circumvent an access control measure. *See* Universal City Studios, Inc. v. Reimerdes, 111 F. Supp. 2d 294, 325 (S.D.N.Y. 2000) (finding a violation of the DMCA where a website linked to other websites that provided computer code for descrambling the content scrambling system used as an access control device on DVDs).

[8] 17 U.S.C. § 107. Fair use recognizes the right of the public to make reasonable uses of copyrighted materials without the copyright owners' consent in situations involving criticism, comment, news reporting, teaching, scholarship, research, and similar activities.

[9] Fair use is only a defense to claims of infringement of the copyright holder's § 106 rights. It does not excuse circumventing a copyright owner's access control device under § 1201. *See Universal City Studios,* 111 F. Supp. 2d at 322 ("[T]he decision not to make fair use a defense to a claim under Section 1201(a) was quite deliberate" on Congress's part). However, § 1201 utilizes factors like those in the fair use doctrine in determining whether the Librarian of Congress should grant an exemption. 17 U.S.C. §§ 1201 (a)(1)(C)(i)-(iv) (considering the copyrighted work's availability for archival, preservation and educational purposes; the impact of the access control device on criticism, comment, news reporting, teaching, scholarship and research; and the effect that circumvention of an access control device has on the market for a work). The DMCA does not bar use of the fair use defense in response to allegations of copyright infringement. 17 U.S.C. § 1201 (c)(1).

[10] 17 U.S.C. § 1201(d).

- a federal, state, or local law enforcement officer accesses a work in the course of a lawful investigation;[11]

- a person who has lawfully obtained use of a computer program accesses a particular portion of the program solely to identify and study elements of the program that are necessary for interoperability and that have not been previously available to him or her;[12]

- a person who made a good faith effort to obtain permission accesses a lawfully obtained published work to conduct encryption research, provided that doing so does not otherwise violate the Copyright Act or the Computer Fraud and Abuse Act (P.L. 99-474);[13] or

- a person identifies and disables access control devices that also collect or disseminate personally identifying information about his or her activities.[14]

Second, the DMCA establishes a rulemaking proceeding, wherein the Librarian of Congress, acting upon the recommendation of the Register of Copyrights, may exempt for three years a "particular class of copyrighted works" from the DMCA's prohibition on circumvention.[15] According to the legislative history of the DMCA, the relatively short duration of these exemptions reflects Congress's intent that the "§ 1201 rulemaking" functions as a "fail safe," monitoring developments in the marketplace for copyrighted works and temporarily waiving enforcement of the prohibition on circumvention in response to those market changes.[16]

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[11] 17 U.S.C. § 1201(e).

[12] 17 U.S.C. § 1201(f). *Compare* United States v. Elcom Ltd., 203 F. Supp. 2d 1111, 1130 (N.D. Cal. 2002) (finding that creating and marketing a program enabling e-book users to read the book on other computers, print from it, and make back-up copies was not protected under 17 U.S.C. § 1201(f)) *with* Lexmark Int'l, Inc. v. Static Control Components, Inc., 387 F.3d 522, 550 (6th Cir. 2004) (finding that in order to promote interoperability, a manufacturer of toner cartridges that mimicked the code allowing its toner to work with a competitor's printers was protected under 17 U.S.C. § 1201(f)).

[13] 17 U.S.C. § 1201(g). *See* Universal City Studios, Inc. v. Reimerdes, 111 F. Supp. 2d 294, 321 (S.D.N.Y. 2000) (finding that a website operator could not rely on the protections of 17 U.S.C. § 1201(g) when its links to websites providing circumventing code were not of the sort to promote research).

[14] 17 U.S.C. § 1201(i).

[15] 17 U.S.C. §§ 1201(a)(1)(B)-(C). *See 1201(a)(1) Exemptions,* 70 Fed. Reg. 57,526, 57,527 (Oct. 3, 2005), available on Feb. 2, 2007, at [http://www.copyright.gov/fedreg/2005/70fr57526.html] (noting that the exemptions announced on November 27, 2006 will expire on October 27, 2009). The 2003 exemptions were to expire on Oct. 27, 2006, but the Librarian of Congress extended them on an interim basis until the 2006 exemptions were announced. *See 1201(a)(1) Exemptions,* 71 Fed. Reg. 63,247 (Oct. 30, 2006).

[16] H.Rept. 105-551, pt. 2, at 36 (1998).

Although these triennial exemptions apply to the DMCA's anti-circumvention provision, they do not affect the DMCA's prohibition on *trafficking* in devices that facilitate circumvention. Thus, while the *act* of circumventing a technological protection measure that controls access to an exempted class of work is not itself a violation of the DMCA during the three-year period, the making and distribution of technology that enables that circumvention is still prohibited and the exemptions cannot be invoked as a defense to an action brought under the DMCA's anti-trafficking ban.[17] Furthermore, the exemptions only apply to persons making *noninfringing* uses of the exempted classes of works — an individual who circumvents an access control to engage in copyright infringement will still be liable for those infringing acts.[18]

The DMCA § 1201(a)(1) Rulemaking Proceeding

The DMCA provides that the Librarian of Congress and the Register of Copyrights determine exemptions through a "rulemaking proceeding."[19] The DMCA's legislative history specifies that this rulemaking proceeding is to be conducted through "notice-and-comment."[20] Accordingly, the Librarian and the Register provided notice of the rulemaking, solicited initial and reply comments from the public, and conducted hearings in granting the 2000, 2003, and 2006 exemptions.[21] Content users who are presently affected, or likely to be affected within the next three years, may propose exemptions to the DMCA's prohibition on circumvention.[22]

Proponents of exemptions bear the burden of proof.[23] Based upon its reading of the DMCA statute and legislative history, the Copyright Office has determined that to meet this burden of proof, proponents must (1) identify the specific technological measures causing the alleged problems and show that these measures effectively control access to copyrighted works; (2) explain the non-infringing

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[17] *See* 17 U.S.C. § 1201(a)(1)(E) ("Neither the exception under subparagraph (B) from the applicability of the prohibition contained in subparagraph (A), nor any determination made in a rulemaking conducted under subparagraph (C), may be used as a defense in any action to enforce any provision of this title other than this paragraph.").

[18] 17 U.S.C. §§ 1201(a)(1)(B)-(E).

[19] 17 U.S.C. § 1201(a)(1)(C).

[20] H.Rept. 105-796, at 64 (1998) ("It is the intention of the conferees that, as is typical with other rulemaking under title 17, and in recognition of the expertise of the Copyright Office, the Register of Copyrights will conduct the rulemaking, including providing notice of the rulemaking [and] seeking comments from the public.").

[21] *See, e.g., 1201(a)(1) Exemptions,* 71 Fed. Reg. 9,302 (Feb. 23, 2006), available on Feb. 2, 2007, at [http://www.copyright.gov/fedreg/2006/71fr9302.html] (notice of public hearings)*; 1201(a)(1) Exemptions,* 70 Fed. Reg. 57,526 (Oct. 3, 2005), available on Feb. 2, 2007, at [http://www.copyright.gov/fedreg/2005/70fr57526.html] (request for comments).

[22] 17 U.S.C. §§ 1201(a)(1)(B)-(C).

[23] *1201(a)(1) Exemptions,* 70 Fed. Reg. 68,472, 68,473 (Nov. 27, 2006), available on Feb. 2, 2007, at [http://www.copyright.gov/fedreg/2006/71fr68472.html].

activities that the prohibition adversely affects; and (3) establish that the prevented activities are, in fact, non-infringing under current law.[24]   Only technological measures that restrict access are considered; non-technological measures that restrict access (e.g., contracts or usage agreements) are not considered, nor are technological measures that control things other than access (e.g., reproduction or distribution).[25] The technological measure must directly lead to the problems of which the exemption's proponent complains: "[a]dverse impacts that flow from other sources ... are outside the scope of the rulemaking."[26]   The problems complained of must be more than "isolated harm or mere inconveniences,"[27] and the adverse effects must be substantial.[28]   Claims of present problems and adverse effects should be supported by first-hand knowledge of "verifiable problems occurring in the marketplace" and, preferably, documented by factual and quantitative data.[29] Claims of future problems and adverse effects should be especially well documented, because the legislative history of the DMCA provides that future harm should only be recognized "in extraordinary circumstances in which the evidence of likelihood is highly specific, strong and persuasive."[30]   Non-infringing activities must be recognized under the

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[24] *1201(a)(1) Exemptions,* 70 Fed. Reg. 57,526, 57,529-30 (Oct. 3, 2005), available on Feb. 2, 2007, at [http://www.copyright.gov/fedreg/2005/70fr57526.html].

[25] *See, e.g., 1201(a)(1) Exemptions,* 65 Fed. Reg. 64,555, 64,563 and 64,571(Oct. 27, 2000), available on Feb. 2, 2007, at [http://www.copyright.gov/fedreg/2000/65fr64555.html] (noting that "[m]any of the complaints aired in this rulemaking actually related primarily to licensing practices rather than technological measures that control access to works" and rejecting an exemption for "fair use" works because its proponents complained, in part, of technological measures that prevent copying, not access).

[26] H.Rept. 105-551, pt. 2, at 37 (1998).

[27] *1201(a)(1) Exemptions,* 70 Fed. Reg. 68,472, 68,473 (Nov. 27, 2006), available on Feb. 2, 2007, at [http://www.copyright.gov/fedreg/2006/71fr68472.html].

[28] *1201(a)(1) Exemptions,* 70 Fed. Reg. 57,526, 57,528 (Oct. 3, 2005), available on Feb. 2, 2007, at [http://www.copyright.gov/fedreg/2005/70fr57526.html]. The Copyright Office has been criticized for requiring a "substantial" adverse effect, because 17 U.S.C. §§ 1201(a)(1)(B)-(C) do not specify how "adversely affected" a use must be in order to merit an exemption. *See, e.g.,* Bill D. Herman & Oscar H. Gandy, *Catch 1201: A Legislative History and Content Analysis of the DMCA Exemption Proceedings*, 24 CARDOZO ARTS & ENT. L. J. 121, 168 (2006). The Copyright Office defends the substantiality requirement by referring to the DMCA's legislative history, which speaks of "substantial adverse impact," "distinct, verifiable, and measurable impacts," and more than de minimis impacts. *See 1201(a)(1) Exemptions,* 68 Fed. Reg. 62,011, 62,013 (Nov. 27, 2006), available on Feb. 2, 2007, at [http://www.copyright.gov/fedreg/2006/71fr68472.html].

[29] *1201(a)(1) Exemptions,* 70 Fed. Reg. 57,526, 57,528 (Oct. 3, 2005), available on Feb. 2, 2007, at [http://www.copyright.gov/fedreg/2005/70fr57526.html]. *See also id.* at 57,530 ("It [is] also useful for the commenter to quantify the adverse effects in order to explain the scope of the present or likely problem.") and *1201(a)(1) Exemptions,* 71 Fed. Reg. 9,302, 9,302 (Feb. 23, 2006), available on Feb. 2, 2007, at [http://www.copyright.gov/fedreg/2006/71fr9302.html] ("[F]actual arguments are at least as important as legal arguments.").

[30] House Committee on the Judiciary, 105th Cong., *Section-by-Section Analysis of H.R. 2281 as Passed by the United States House of Representatives on August 4, 1998*, at 6. Although this language could be interpreted as raising the burden of proof beyond a preponderance

current law and must not be possible by alternative means.[31] Proponents arguing for the renewal of existing exemptions must make their case de novo.[32] The existence of an exemption that was granted in previous rulemaking proceedings does not create a presumption in its favor; rather, it must be justified as if it were a new exemption.[33]

Even when proponents demonstrate that access control devices adversely affect their abilities to make non-infringing uses of copyrighted works, their exemptions are not automatically granted.[34] Rather, the Librarian of Congress and the Register of Copyrights weigh the proven harm against other factors prescribed by statute in determining whether to grant an exemption. These factors include

- the availability of copyrighted works generally;

- the availability of copyrighted works for nonprofit archival, preservation, and educational purposes;

- the impact of access control devices on criticism, comment, news reporting, teaching, scholarship, and research;

- the effect that circumvention of access control devices would have on the market for or value of copyrighted works; and

- any other factors the Librarian deems appropriate.[35]

These factors are intended to ensure that the Librarian and the Register balance the adverse and positive effects of access control devices, which not only limit access but also promote copyright owners' willingness to disseminate their works in new

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[30] (...continued)
of the evidence, which is otherwise the standard in a DMCA § 1201 rulemaking, the Copyright Office nonetheless applies the preponderance standard with claims of future problems or adverse effects since the statutory language provides no additional requirements. *See 1201(a)(1) Exemptions,* 70 Fed. Reg. 57,526 (Oct. 3, 2005), available on Feb. 2, 2007, at [http://www.copyright.gov/fedreg/2005/70fr57526.html].

[31] *See, e.g., 1201(a)(1) Exemptions,* 70 Fed. Reg. 68,472, 68,478 (Nov. 27, 2006), available on Feb. 2, 2007, at [http://www.copyright.gov/fedreg/2006/71fr68472.html] (rejecting an exemption for space-shifting, or copying content from one location to another, because there was no legal precedent establishing space-shifting as a noninfringing use); *id.* (rejecting an exemption for region-coded DVDs because "numerous options are available to individuals seeking access to content from other regions").

[32] *Id* at 68,473.

[33] *Id.*

[34] *1201(a)(1) Exemptions,* 70 Fed. Reg. 57,526, 57,528 (Oct. 3, 2005), available on Feb. 2, 2007, at [http://www.copyright.gov/fedreg/2005/70fr57526.html] ("[P]roof of harm is never the only consideration in the rulemaking process ... the sufficiency of the harm will always be relative to other considerations.").

[35] 17 U.S.C. §§ 1201(a)(1)(C)(i)-(v).

ways.[36] The Register also must consult with the Assistant Secretary for Communications and Information of the Department of Commerce, who heads the National Telecommunications and Information Administration, before recommending exemptions to the Librarian in order to ensure that the market benefits of both access control devices and potential exemptions are fully considered.[37]

Change in the Scope of the Term "Class of Works". In granting exemptions, the Librarian of Congress and the Register of Copyrights must consider to what "class of works" the exemption will apply. The DMCA states that an exemption may be granted only for "a particular class of copyrighted works" upon a sufficient showing of adverse effects.[38] The statute does not define what constitutes a "class of works." The Register sought comments on this issue in the 1999-2000 rulemaking[39] and concluded that a "class of works" was to be defined in relation to the categories of copyrighted works in § 102 of the Copyright Act of 1976,[40] namely, literary works; musical works; dramatic works; pantomimes and choreographic works; pictorial, graphic, and sculptural works; motion pictures and other audiovisual works; sound recordings; and architectural works.[41] However, the Register cited legislative history that expressed the view that the § 102 categories were too broad to serve as the basis for a "class of works."[42] After consulting this legislative history and reviewing the statutory language, the Register determined that a "class of works" was to be a subcategory of the § 102 categories that was "based upon attributes of the works themselves, and not by reference to some external criteria such as the intended

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[36] House Committee on the Judiciary, 105th Cong., *Section-by-Section Analysis of H.R. 2281 as Passed by the United States House of Representatives on August 4, 1998*, at 6 ("The technological measures ... that this bill protects can be deployed, not only to prevent piracy and other economically harmful unauthorized uses of copyrighted materials, but also to support new ways of disseminating copyrighted materials to users, and to safeguard the availability of legitimate uses of those materials by individuals.").

[37] 17 U.S.C. § 1201(a)(1)(C). Based upon market factors, prior Assistant Secretaries have promoted exemptions that the Register ultimately denied and questioned or opposed exemptions that the Register ultimately granted. *See, e.g., 1201(a)(1) Exemptions,* 65 Fed. Reg. 64555, 64562 (Oct. 27, 2000), available on Feb. 2, 2007, at [http://www.copyright.gov /fedreg/2000/65fr64555.html] (Assistant Secretary advocating a "fair use" exemption that was denied); *1201(a)(1) Exemptions,* 70 Fed. Reg. 68,472, 68,476-77 (Nov. 27, 2006), available on Feb. 2, 2007, at [http://www.copyright.gov/fedreg/2006/71fr68472.html] (Assistant Secretary questioning the exemption for wireless telephone handsets granted in 2006).

[38] 17 U.S.C. §§ 1201(a)(1)(B)-(C). *See also* 17 U.S.C. § 1201(a)(1)(D) (noting that an exemption can be for "any class of copyrighted works").

[39] *1201(a)(1) Exemptions,* 64 Fed. Reg. 66,139, 66,143 (Nov. 24, 1999), available on Feb. 2, 2007, at [http://www.copyright.gov/fedreg/1999/64fr66139.pdf].

[40] 17 U.S.C. §§ 102(a)(1)-(8).

[41] *1201(a)(1) Exemptions,* 65 Fed. Reg. 64,555, 64,560 (Oct. 27, 2000), available on Feb. 2, 2007, at [http://www.copyright.gov/fedreg/2000/65fr64555.html].

[42] H.Rept. 105-551, pt. 2, at 38 (1998) ("The Committee intends that the 'particular class of copyrighted works' be a narrow and focused subset of the broad categories of works of authorship [that are] identified in section 102 of the Copyright Act.").

use or users of the works."[43] The Copyright Office applied this definition of "class of works" in terms of the works' attributes in granting the 2000 and 2003 exemptions.[44] It also described "class of works" in terms of works' attributes when seeking comments proposing exemptions for 2006.[45]

However, in granting the 2006 exemptions, the Copyright Office for the first time expanded "class of works" to include classes defined in relation to their uses or users.[46] The Copyright Office implicitly justified this shift by describing how adhering to the prior definition of "class of works" could harm either users or copyright owners in situations where class definitions are necessarily broad but harmed users are few in number.[47] For example, in 2006, film and media studies professors described how their inability to circumvent access controls in order to make compilations of DVD clips for use with their students harmed their teaching. The class here cannot be defined more narrowly than in terms of "motion pictures and other audiovisual works" on DVD. However, granting such an exemption would harm the copyright owners unduly by allowing anyone to copy any film on DVD. Failing to grant such an exemption would harm the professors and their students, though.[48] Thus, the Copyright Office reached a compromise consistent with the congressional intent in enacting § 1201(a)(1) by allowing a "class of works" to be defined in terms of its uses or users.[49] While several commentators noted that the Copyright Office essentially changed the meaning of "class of works" in the middle

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[43] *1201(a)(1) Exemptions,* 65 Fed. Reg. 64,555, 64,559 (Oct. 27, 2000), available on Feb. 2, 2007, at [http://www.copyright.gov/fedreg/2000/65fr64555.html].

[44] *Id.* at 64,572 (rejecting an exemption for materials that cannot be archived or preserved because it did not correspond to any class of works); *1201(a)(1) Exemptions,* 68 Fed. Reg. 62,011, 62,014 (Oct. 31, 2003), available on Feb. 2, 2007, at [http://www.copyright.gov/ fedreg/2003/68fr2011.pdf] (rejecting an exemption for "per se educational fair use works" because it defined the class of works in reference to its uses and users).

[45] *1201(a)(1) Exemptions,* 70 Fed. Reg. 57,526, 57,529 (Oct. 3, 2005), available on Feb. 2, 2007, at [http://www.copyright.gov/fedreg/2005/70fr57526.html].

[46] *1201(a)(1) Exemptions,* 70 Fed. Reg. 68,472, 68,473 (Nov. 27, 2006), available on Feb. 2, 2007, at [http://www.copyright.gov/fedreg/2006/71fr68472.html].

[47] *Id.*

[48] *Id.*

[49] In fact, when arriving at its narrowed definition of "class of works" in terms of the works' attributes in 1999-2000, the Copyright Office noted that the DMCA statute apparently allowed a broader definition of "class of works" in terms of the works' uses and users. *See 1201(a)(1) Exemptions,* 65 Fed. Reg. 64,556, 64,559 (Oct. 27, 2000), available on Feb. 2, 2007, at [http://www.copyright.gov/fedreg/2000/65fr64555.html] ("[T]he statutory language is arguably ambiguous, and one could imagine an interpretation of section 1201(a)(1) that permitted a class of works to be defined in terms of criteria having nothing to do with the intrinsic qualities of the works.").

of the rulemaking process,[50] its doing so will likely not affect the status of the exemptions.[51]

The 2006 Exemptions

Exemptions Granted. As a result of the most recent § 1201(a)(1) rulemaking process, the Librarian of Congress granted the following six exemptions.

1. Audiovisual works included in the educational library of a college or university film or media studies department when circumvention is for the purpose of compiling portions of these works for educational use in the classroom.[52] Before this exemption, film and media studies professors who wanted to show segments of DVDs to their students could not create compilations of those segments because copying them into a compilation would require bypassing the content scrambling systems (CSSs) protecting DVDs. Thus, professors and students previously lost 30 seconds of class time, or more, every time a new DVD was loaded and displayed its introductory materials.[53] Under the exemption, professors can copy segments to other presentation media that allow seamless transitions between materials originally from different DVDs.

2. Preservation or archival reproduction, by libraries or archives, of computer programs and video games that were distributed in formats that have become obsolete and that require the original media or hardware as a condition of access.[54] Computer programs and video games constitute important parts of modern American cultural history, and archives and museums are thus interested in preserving them for future generations. However, where these programs are protected by access control devices, such as hardware-authentication, the DMCA precludes archivists from circumventing those devices

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[50] *See, e.g.,* Alex Curtis, *DMCA Exemptions 2006: The Good, the Bad, and the Bewildering* (Nov. 27, 2006), available on Feb. 2, 2007, at [http://www.publicknowledge.org/node/734].

[51] As long as the Copyright Office's interpretation is reasonable, courts will grant it deference if it were challenged as a rulemaking action. Courts consider whether (1) the statute permits or forbids an agency's interpretation and (2) if the statute is unclear, whether the agency's interpretation is reasonable or permissible. If the agency's interpretation is reasonable, the court will defer to it. Chevron U.S.A., Inc. v. Natural Res. Def. Council, Inc., 467 U.S. 837 (1984). If the Copyright Office's interpretation is challenged as an adjudicative action, courts consider (1) the thoroughness of the evidence in the agency's decision; (2) the validity of its reasoning; (3) its consistency with earlier and later pronouncements; and (4) "all those factors which give it power to persuade." Skidmore v. Swift & Co., 323 U.S. 134, 140 (1944).

[52] *1201(a)(1) Exemptions,* 70 Fed. Reg. 68,472, 68,473-74 (Nov. 27, 2006), available on Feb. 2, 2007, at [http://www.copyright.gov/fedreg/2006/71fr68472.html].

[53] *Id.*

[54] *Id.* at 68,474-75.

even to make a copy for preservation purposes. Under this exemption, archivists can now work around such access control devices to make preservation copies.[55]

3. Computer programs protected by "dongles" that prevent access due to malfunction or damage and that are obsolete.[56] Some manufacturers restrict access to their copyrighted works by relying on "dongles," or hardware locks attached to computers that interact with software to prevent unauthorized access.[57] But when the locks malfunction and the manufacturer is unresponsive or no longer in business, consumers are unable to use these programs because the DMCA bars them from bypassing the dongle to access the program. This exemption ensures that consumers facing problems with dongles can still use their software.

4. Literary works distributed in e-book format when all existing e-book editions contain access controls that prevent enabling the read-aloud function or screen readers.[58] People who are blind or visually impaired rely on read-aloud programs and screen readers to turn eye-readable text into audible speech. However, some manufacturers distribute e-books with their read-aloud and screen reader functions disabled through access control devices. People who are blind or visually impaired cannot circumvent these access control devices to "read" the books' content. With this exemption, they can circumvent access control devices when no version of the e-book works with the read-aloud or screen reader functions.[59]

5. "Firmware" computer programs that connect cellular telephones to a particular communication network, when the circumvention is done to connect the telephone to another network.[60] Cell phone companies prevent customers from "recycling" their cell phones, or using them with other carriers once their contracts have expired, by using "software locks" to block access to the operating system that connects the phone to the carrier's network.[61] While the DMCA prohibits circumventing software locks, this exemption allows cell phone users to bypass the software locks and change their phones over to other networks.[62]

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[55] *Id.*

[56] *Id.* at 68,475.

[57] *Id.*

[58] *1201(a)(1) Exemptions,* 70 Fed. Reg. 68,472, 68,475-76 (Nov. 27, 2006), available on Feb. 2, 2007, at [http://www.copyright.gov/fedreg/2006/71fr68472.html].

[59] *Id.*

[60] *Id.* at 68,476-77.

[61] *See* TracFone Wireless, Inc. v. Sol Wireless Group, Inc.,Complaint No. 05-23279 (S.D. Fla., Dec. 21, 2005), available on Feb. 2, 2007, at [http://www.copyright.gov/1201/2006/ reply/14granick_WA.pdf], at ¶ 42-49 (alleging a violation of 17 U.S.C. § 1201(a)(1) against a cell phone recycling company).

[62] However, this exemption does not extend to trafficking in devices that help consumers change their cell phones over to other networks, because such trafficking is covered in a section of the DMCA to which the exemptions do not apply. *See also id.* at ¶ 50-58

(continued...)

6. Good faith testing for correcting of security flaws or vulnerabilities in sound recordings and audiovisual works distributed in CD format.[63] In November 2005, many consumers were unhappy to learn that Sony-BMG had sold them Celine Dion, Neil Diamond, and other music compact discs that secretly installed rootkit software on their computers.[64] Rootkit is software designed to conceal running processes, files, or systems data from a computer's operating system. Researchers attempting to determine the extent of the problem and potential fixes for it were stymied in their efforts by the DMCA's prohibition on circumvention, which kept them from bypassing access controls on the CDs to figure out how the rootkit installation worked.[65] With this exemption, researchers will be able to investigate and correct similar problems in the future.

These six exemptions are effective through October 27, 2009.[66] They are the largest group of exemptions the Librarian has granted to date, although three of these (preservation or archival reproduction of computer programs and video games, computer programs protected by dongles, and e-books) essentially correspond to prior exemptions.[67] The 2003 and 2006 e-book exemptions were slightly different in that the 2003 exemption allowed circumvention only where all existing editions of the work prevented enabling the e-book's read-aloud function *and* screen reader, whereas the 2006 exemption allows circumvention where all existing editions of the work prevent enabling the e-book's read-aloud function *or* screen reader.[68] See **Appendix A** for a comparison of the exemptions granted in 2000, 2003, and 2006.

Exemptions Denied. The 2006 rulemaking denied all but 6 of the 74 proposed exemptions.[69] Among those denied were exemptions for

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[62] (...continued)
(alleging a violation of 17 U.S.C. § 1201(a)(2) against a cell phone recycling company).

[63] *1201(a)(1) Exemptions,* 70 Fed. Reg. 68472, 68477 (Nov. 27, 2006), available on Feb. 2, 2007, at [http://www.copyright.gov/fedreg/2006/71fr68472.html].

[64] Electronic Frontier Foundation, *Are You Infected with Sony-BMG's Rootkit? EFF Confirms Secret Software on 19 CDs* (Nov. 9, 2005), available on Feb. 2, 2007, at [http://www.eff.org/news/archives/2005_11.php#004146].

[65] *1201(a)(1) Exemptions,* 70 Fed. Reg. 68,472, 68,477 (Nov. 27, 2006), available on Feb. 2, 2007, at [http://www.copyright.gov/fedreg/2006/71fr68472.html].

[66] *Id.* at 68,472.

[67] *1201(a)(1) Exemptions,* 65 Fed. Reg. 64,556, 64,564 (Oct. 27, 2000), available on Feb. 2, 2007, at [http://www.copyright.gov/fedreg/2000/65fr64555.pdf]; *1201(a)(1) Exemptions,* 68 Fed. Reg. 62,011, 62,013 (Oct. 31, 2003), available on Feb. 2, 2007, at [http://www.copyright.gov/fedreg/2003/68fr2011.pdf].

[68] *1201(a)(1) Exemptions,* 70 Fed. Reg. 68,472, 68,476-77 (Nov. 27, 2006), available on Feb. 2, 2007, at [http://www.copyright.gov/fedreg/2006/71fr68472.html]; *1201(a)(1) Exemptions,* 68 Fed. Reg. 62,011, 62,014 (Oct. 31, 2003), available on Feb. 2, 2007, at [http://www.copyright.gov/fedreg/2003/68fr2011.pdf].

[69] *Rulemaking on Exemptions from Prohibition on Circumvention of Technological Measures that Control Access to Copyrighted Works* (Nov. 16, 2006), available on Feb. 2,

- space-shifting, which would have allowed circumvention in order to copy a lawfully obtained audiovisual or musical work from the medium or device on which it was intended for use onto other media or devices;[70]

- region-coded DVDs, which would have allowed users to play DVDs that are engineered to work only on players coded for one geographic region on players with different region-codes;[71]

- works protected by access control devices that prevent the creation of back-up copies, which would have allowed consumers to make copies of lawfully obtained works to prevent their damage or destruction;[72] and

- audiovisual works and sound recordings protected by broadcast flags, which could in the future allow users to time-shift, format-shift, and record for personal use television and radio programs.[73]

Many exemptions were denied because there was no evidence of harm, or no harm involving access control devices, and their proponents complained only of insubstantial inconvenience.[74]

The 2006 rulemaking also marked the first time that the Copyright Office and the Librarian rejected a preexisting exemption proposed for renewal. The exemption for compilations consisting of lists of Internet programs blocked by filtering software, which had been granted in 2000 and 2003, was rejected in 2006 because its

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[69] (...continued)
2007, at [http://www.copyright.gov/1201/2006/comments/index.html].

[70] *1201(a)(1) Exemptions,* 70 Fed. Reg. 68,472, 68,478 (Nov. 27, 2006), available on Feb. 2, 2007, at [http://www.copyright.gov/fedreg/2006/71fr68472.html].

[71] *Id.* at 68,478.

[72] *Id.* U.S. copyright law generally provides users with the right to create backup copies of computer programs, *see* 17 U.S.C. § 117, but users may not circumvent an access control device to exercise their rights under 17 U.S.C. § 117.

[73] *1201(a)(1) Exemptions,* 70 Fed. Reg. 68,472, 68,479 (Nov. 27, 2006), available on Feb. 2, 2007, at [http://www.copyright.gov/fedreg/2006/71fr68472.html]. Because broadcast flags are not currently mandated for either television or radio broadcasts, as the Copyright Office noted in the 2006 rulemaking, it is hard to assess exactly what granting this exemption would allow users to do. *Id.* For more information about broadcast flags, see CRS Report RL33797, *Copyright Protection of Digital Television: The Broadcast Video Flag*, by Brian T. Yeh, and CRS Report RS22489, *Copyright Protection of Digital Audio Radio Broadcasts: The "Audio Flag,"* by Jared Huber and Brian T. Yeh.

[74] *See, e.g.*, *1201(a)(1) Exemptions,* 70 Fed. Reg. 68,472, 68,478 (Nov. 27, 2006), available on Feb. 2, 2007, at [http://www.copyright.gov/fedreg/2006/71fr68472.html] (rejecting an exemption for region-coded DVDs because "[r]egion coding imposes, at most, an inconvenience rather than an actual or likely harm").

proponents relied on the record from three years earlier.[75] Because proponents did not address the current market conditions or demonstrate that the exemption had been used, it was denied.[76]

Public Responses and Reactions. Supporters of the 2006 exemptions characterized them as beneficial to consumers generally, or to specific user groups. Because the Librarian granted more exemptions in 2006 than in prior years, some predicted that this year's exemptions "will open 'big chinks' in DMCA authority."[77] Others focused specifically on the cell phone exemption, calling it "good news for consumers. Consumers pay dearly for their phones. It'd be nice if they can keep them working with other carriers."[78] The *Chronicle of Higher Education* similarly described the exemptions allowing film and media professors to create compilations and computer scientists to research the security flaws of sound recordings and audiovisual works distributed on CD as "wins" for scholars.[79]

Some critics of the exemptions faulted the exemptions for not going far enough in protecting consumers.   Pro-consumer groups noted that a number of the exemptions are tailored to narrow user groups not made up of "average" consumers (e.g., the exemptions for film studies professors and archiving computer programs), and that the exemptions that would have been most beneficial to consumers (e.g., space-shifting) were rejected.[80] They also objected that the exemptions are too limited to counteract the negative effects of the DMCA, which "block[s] good technologies."[81] In contrast, some industry groups criticized the exemptions for their potential to harm specific industries. The cell phone exemption, in particular, generated significant opposition from cell phone carriers and industry associations.[82]

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[75] *Id.* at 68,477-78.

[76] *Id.*

[77] *New Exemptions Loosen DMCA Circumvention Ban,* COMMUNICATIONS DAILY, Nov. 28, 2006 (2006 WLNR 20716497) (quoting *Information Week* blogger David DeJean).

[78]   *TracFone Seeks Reversal of Library of Congress Ruling*, TELECOMMUNICATIONS REPORTS, Dec. 15, 2006 (2006 WLNR 21440416) (quoting Jeannine Kenney, senior policy analyst for the Consumers Union).

[79] Scott Carlson, *Scholars Win Exemptions to Digital-Copyright Act*, CHRON. OF HIGHER EDUC., Dec. 8, 2006, at A31.

[80] Alex Curtis, *DMCA Exemptions 2006: The Good, the Bad, and the Bewildering* (Nov. 27, 2006), available on Feb. 2, 2007, at [http://www.publicknowledge.org/node/734]. *See also* Jason H. Tokoro, *"Stuffing" the DMCA "Turkey" with 6 New Exemptions a Day before Thanksgiving*, Nov. 23, 2006, available on Feb. 2, 2007, at [http://www.chillingeffects.org/anticircumvention/weather.cgi?WeatherID=572] (quoting Fred von Lohmann, an attorney for the Electronic Frontier Foundation, as saying that the Copyright Office "may not have done enough to benefit consumers").

[81] Scott Brader, *Copyright Law: Tiny Changes*, NETWORK WORLD, Dec. 1, 2006, at 36.

[82] *TracFone Seeks Reversal of Library of Congress Ruling*, TELECOMMUNICATIONS REPORTS (Dec. 15, 2006) (2006 WLNR 21440416).

In fact, TracFone Wireless, Inc., has filed suit in federal district court in Florida challenging this exemption.[83]

Conclusion

The 2006 exemptions to the DMCA's prohibition on circumvention of technological measures controlling access to copyrighted works will, under certain circumstances, allow users to circumvent those access controls in order to (1) make compilations of video clips for film and media studies courses; (2) archive obsolete computer programs or games; (3) bypass "dongles," or hardware locks, that are obsolete; (4) use read-aloud functions or screen readers with e-books; (5) connect wireless telephone handsets to communication networks; and (6) test for or correct security flaws in works distributed on CD. These exemptions are effective for the next three years, at the end of which time they will be superseded by new exemptions issued by the Librarian of Congress, on the recommendation of the Register of Copyrights, following a notice-and-comment rulemaking proceeding conducted pursuant to 17 U.S.C. § 1201(a)(1).

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[83] TracFone Wireless, Inc. v. Billington, Complaint No. 06-22942 (S.D. Fla., Dec. 5, 2006), available on Feb. 2, 2007, at [http://www.granick.com/blog/wp-content/uploads/2006/ 12/Gibson,%20Annette%20-%2012-05-06%20-%20B7WJ388.pdf]. TracFone argues, first, that this exemption was promulgated in violation of the Administrative Procedure Act because the Copyright Office failed to provide adequate notice and opportunity to comment; acted arbitrarily, capriciously, in abuse of discretion, and not in accordance with the law; and granted a vague and overly broad exemption. *Id.* at ¶ 37-38. TracFone further argues that the DMCA's delegation of rulemaking authority to the Librarian of Congress and the Register of Copyrights is either an unconstitutional intra-branch delegation of Congress's legislative power or an unconstitutional exercise of executive power by the legislative branch. *Id.* at ¶ 46-47.

Appendix A. Exemptions Granted under 17 U.S.C. §§ 1201(a)(1)(B)-(C) in 2000, 2003, and 2006

2000	2003	2006
1. Compilations consisting of lists of websites blocked by filtering software applications. 2. Literary works, including computer programs and databases, protected by access control mechanisms that fail to permit access because of malfunction, damage or obsoleteness.	1. Compilations consisting of lists of Internet programs blocked by filtering software. 2. Computer programs protected by dongles that prevent access due to malfunction or damage, or which are obsolete. 3. Computer programs and video games distributed in formats that have become obsolete and require original hardware or media as a condition of access. 4. Literary works in e-book format, when all existing editions of the work contain access controls that prevent enabling the e-book's read-aloud function and screen readers to read the text into specialized format.	1. Audiovisual works included in the educational library of a college or university's film or media studies department when circumvention is accomplished for the purpose of making compilations of portions of these works for educational use in the classroom. 2. Preservation or archival reproduction of computer programs and video games distributed in formats that have become obsolete and that require the original media or hardware as a condition of access. 3. Computer programs protected by dongles that prevent access due to malfunction or damage and which are obsolete. 4. Literary works distributed in e-book format when all existing e-book editions contain access controls that prevent enabling the read-aloud function or screen readers. 5. Computer programs in the form of firmware enabling wireless telephone handsets to connect to communication networks, when the circumvention is for the purpose of connecting to a communication network. 6. Good faith testing, investigating or correcting of security flaws or vulnerabilities in sound recordings and AV works distributed in CD format.