

LIBRARY OF CONGRESS

Copyright Office

37 CFR Part 201

[Docket No. RM 2005-11]

Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies

AGENCY: Copyright Office, Library of Congress.

ACTION: Final rule.

SUMMARY: This notice announces that during the next three years, the prohibition against circumvention of technological measures that effectively control access to copyrighted works shall not apply to persons who engage in noninfringing uses of six classes of copyrighted works.

EFFECTIVE DATE: [date of publication in the Federal Register]

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SUPPLEMENTARY INFORMATION:

In this notice, the Librarian of Congress, upon the recommendation of the Register of Copyrights, announces that during the period from the time of this notice through October 27, 2009, the prohibition against circumvention of technological measures that effectively control access to copyrighted works shall not apply to persons who engage in noninfringing uses of six classes of copyrighted works. This announcement is the culmination of a rulemaking proceeding commenced by the Register on October 3, 2005. A more comprehensive statement of the background and legal requirements of the rulemaking, a discussion of the record and the

Register's analysis may be found in the Register's memorandum of November 17, 2006, to the Librarian, which contains the full explanation of the Register's recommendation.¹ This notice summarizes the Register's recommendation and publishes the regulatory text codifying the six exempted classes of works.

I. Background

A. Legislative Requirements for Rulemaking Proceeding

In 1998, Congress enacted the Digital Millennium Copyright Act ("DMCA"), which among other things amended title 17, United States Code, to add section 1201. Section 1201 prohibits circumvention of technological measures employed by or on behalf of copyright owners to protect their works (hereinafter "access controls"). In order to ensure that the public will have continued ability to engage in noninfringing uses of copyrighted works, such as fair use, subparagraph (B) limits this prohibition, exempting noninfringing uses of any "particular class of works" when users are (or in the next 3 years are likely to be) adversely affected by the prohibition in their ability to make noninfringing uses of that class of works. Identification of such classes of works is made in a rulemaking proceeding conducted by the Register of Copyrights, who is to provide notice of the rulemaking, seek comments from the public, consult with the Assistant Secretary for Communications and Information of the Department of Commerce, and recommend final regulations to the Librarian of Congress. The regulations, to be issued by the Librarian of Congress, announce "any class of copyrighted works for which the Librarian has determined, pursuant to the rulemaking conducted under subparagraph (C), that noninfringing uses by persons who are users of a copyrighted work are, or are likely to be,

¹ A copy of the Register's memorandum may be found at <http://www.copyright.gov/1201>.

adversely affected, and the prohibition contained in subparagraph (A) shall not apply to such users with respect to such class of works for the ensuing 3-year period.”²

The first section 1201 rulemaking took place in 2000, and on October 27, 2000, the Librarian determined that noninfringing users of two classes of works would not be subject to the prohibition on circumvention of access controls.³ Exemptions to the prohibition on circumvention remain in force for a three-year period and expire at the end of that period. The Librarian is required to make a determination on potential new exemptions every three years. The second rulemaking culminated in the Librarian’s October 28, 2003, announcement that noninfringing users of four classes of works would not be subject to the prohibition on circumvention of access controls.⁴

B. Responsibilities of Register of Copyrights and Librarian of Congress

The purpose of the rulemaking proceeding conducted by the Register is to determine whether users of particular classes of copyrighted works are, or in the next three years are likely to be, adversely affected by the prohibition in their ability to make noninfringing uses of copyrighted works. In making her recommendation to the Librarian, the Register must carefully balance the availability of works for use, the effect of the prohibition on particular uses and the

² 17 U.S.C. 1201(a)(1)(D).

³ Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies, 65 FR 64555 (October 27, 2000); <http://www.copyright.gov/fedreg/2000/65fr64555.pdf>. The **Federal Register** notice contained the recommendation of the Register of Copyrights and the determination of the Librarian.

⁴ The announcement was published in the **Federal Register** on October 31, 2003. Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies, 68 FR 62011 (October 31, 2003); <http://www.copyright.gov/fedreg/2003/68fr2011.pdf>. On October 30, 2006, the Librarian announced that the existing classes of works were being extended, on an interim basis, pending the conclusion of the current rulemaking proceeding. Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies, 71 FR 63247 (October 30, 2006).

effect of circumvention on copyrighted works. Section 1201(a)(1)(C) directs the Register and the Librarian to examine: “(i) the availability for use of copyrighted works; (ii) the availability for use of works for nonprofit archival, preservation, and educational purposes; (iii) the impact that the prohibition on the circumvention of technological measures applied to copyrighted works has on criticism, comment, news reporting, teaching, scholarship, or research; (iv) the effect of circumvention of technological measures on the market for or value of copyrighted works; and (v) such other factors as the Librarian considers appropriate.”

C. The Purpose and Focus of the Rulemaking

1. Purpose of the Rulemaking

As originally drafted, section 1201(a)(1) provided simply that “No person shall circumvent a technological measure that effectively controls access to a work protected under this title.” However, in response to concerns that section 1201, in its original form, might undermine Congress's commitment to fair use if developments in the marketplace relating to use of access controls result in less access to copyrighted materials that are important to education, scholarship, and other socially vital endeavors, it was determined that a triennial rulemaking proceeding should take place to monitor the use of access controls. If the rulemaking record revealed that access was being unduly restricted, e.g., by elimination of print or other hard-copy versions, permanent encryption of all electronic copies or adoption of business models that restrict distribution and availability of works, then users of particular classes of works who are engaging in noninfringing uses of those works would be allowed to circumvent access controls without running afoul of the prohibition in section 1201(a)(1). The rulemaking proceeding, to be conducted by the Register of Copyrights, was considered a “fail-safe” mechanism, monitoring

developments in the marketplace for copyrighted materials, and would allow the enforceability of the prohibition against the act of circumvention to be selectively waived, for limited time periods, if necessary to prevent a diminution in the availability to individual users of a particular category of copyrighted materials.

2. *The Necessary Showing*

Proponents of an exemption have the burden of proof. In order to make a prima facie case for an exemption, proponents must show by a preponderance of the evidence that there has been or is likely to be a substantial adverse effect on noninfringing uses by users of copyrighted works. De minimis problems, isolated harm or mere inconveniences are insufficient to provide the necessary showing. Similarly, for proof of “likely” adverse effects on noninfringing uses, a proponent must prove by a preponderance of the evidence that the harm alleged is more likely than not; a proponent may not rely on speculation alone to sustain a prima facie case of likely adverse effects on noninfringing uses. It is also necessary to show a causal nexus between the prohibition on circumvention and the alleged harm.

Proposed exemptions are reviewed *de novo*. The existence of a previous exemption creates no presumption for consideration of a new exemption, but rather the proponent of such an exemption must make a prima facie case in each three-year period.

3. *Determination of “Class of Works”*

In previous rulemakings, it was determined that the starting point for any definition of a “particular class” of works in this rulemaking must be one of the categories of works set forth in section 102 of the Copyright Act, but that those categories are only a starting point and a “class” will generally constitute some subset of a section 102 category. The determination of the

appropriate scope of a “class of works” recommended for exemption will also take into account the likely adverse effects on noninfringing uses and the adverse effects an exemption may have on the market for or value of copyrighted works.

It was also determined that while starting with a section 102 category of works, or a subcategory thereof, the description of a “particular class” of works ordinarily should be further refined by reference to other factors that assist in ensuring that the scope of the class addresses the scope of the harm to noninfringing uses. For example, the class might be defined in part by reference to the medium on which the works are distributed, or even to the access control measures applied to them. But classifying a work solely by reference to the medium on which the work appears, or the access control measures applied to the work, would be beyond the scope of what “particular class of work” is intended to be.

In the current proceeding, the Register has concluded that in certain circumstances, it will also be permissible to refine the description of a class of works by reference to the type of user who may take advantage of the exemption or by reference to the type of use of the work that may be made pursuant to the exemption. The Register reached this conclusion in reviewing a request to exempt a class of works consisting of “audiovisual works included in the educational library of a college or university’s film or media studies department and that are protected by technological measures that prevent their educational use.” Concluding that a “class” must be properly tailored not only to address the harm demonstrated, but also to limit the adverse consequences that may result from the creation of an exempted class, the Register has concluded that given the facts demonstrated by the film professor proponents of the exemption and the legitimate concerns expressed by the opponents of the proposed exemption, it makes sense that a

class may, in appropriate cases, be additionally refined by reference to the particular type of use and/or user.

D. Consultation with the Assistant Secretary for Communications and Information

As required by section 1201(a)(1)(C), the Register consulted with the Assistant Secretary for Communications and Information of the Department of Commerce, meeting with him at the outset of the rulemaking proceeding and exchanging information throughout the course of the proceeding. The Assistant Secretary communicated his views to the Register in letters dated September 13, 2006, and October 31, 2006. The letters related to the proposal to designate as a class of works “Computer programs that operate wireless communications handsets,” and are discussed below in the discussion of that particular proposal.

II. Solicitation of Public Comments and Hearings

On October 3, 2005, the Register initiated the current rulemaking proceeding pursuant to section 1201(a)(1)(C) with publication of a Notice of Inquiry.⁵ The Copyright Office received 74 written comments proposing a class or classes of works for exemption. Supporters and opponents of these proposals filed 35 reply comments. Four days of public hearings were conducted in Spring 2006 in Washington, D.C., and Palo Alto, California. Following the hearings, the Office sent follow-up questions to some of the hearing witnesses, and responses were received during the summer. The entire record in this and the previous section 1201(a)(1)(C) rulemakings are available on the Office’s website.⁶

⁵ 70 FR 57526 (October 3, 2005); <http://www.copyright.gov/fedreg/2005/70fr57526.html>.

⁶ <http://www.copyright.gov/1201/index.html>. Some of the witnesses at the hearing submitted audiovisual materials which are not available on the website, but are on file with the Copyright Office.

The Register has now carefully reviewed and analyzed the entire record in this rulemaking proceeding to determine whether any classes of copyrighted works should be exempt from the prohibition against circumvention during the next three years. The Register recommends that noninfringing users of six classes of works be exempt from the prohibition on circumvention of access controls.

III. Discussion

A. *The Six Exempted Classes*

Based on the Register's review of the record, the case has been made for exemptions pertaining to the following six classes of copyrighted works.

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 those works for educational use in the classroom by media studies or film professors.

A number of film and media studies professors proposed a class consisting of "Audiovisual works included in the educational library of a college or university's film or media studies department and that are protected by technological measures that prevent their educational use." They asserted that in order to teach their classes effectively, they need to be able to create compilations of portions of motion pictures distributed on DVDs protected by CSS for purposes of classroom performance. They also asserted that in order to show pedagogically necessary, high quality content in a reasonably efficient manner, they must circumvent CSS in order to extract the portions of motion pictures or audiovisual works necessary for their pedagogical purposes.

The proponents of this exemption demonstrated that the reproduction and public performance of short portions of motion pictures or other audiovisual works in the course of

face-to-face teaching activities of a film or media studies course would generally constitute a noninfringing use. Moreover, the record did not reveal any alternative means to meet the pedagogical needs of the professors. The professors demonstrated that the encrypted DVD versions of motion pictures often are of higher quality than copies in other available formats and contain attributes that are extremely important to teaching about film for a number of reasons. For example, the DVD version of a motion picture can preserve the original color balance and aspect ratio of older motion pictures when other available alternatives fail to do so.

The most significant objection to the proposal was the concern expressed by copyright owners that an exemption for a “class of works” would necessarily exempt a much broader range of uses than those in which the film professors wished to engage. Copyright owners noted that in prior rulemakings, the Register had determined that a class must be based primarily on attributes of the work itself and not the nature of the use or the user. Therefore, recognizing the class sought by the film professors would benefit not only persons similarly situated to the film professors, but others engaging in entirely different uses. Further, copyright owners believed that such an exemption would create confusion about the circumstances in which circumvention was appropriate.

The concerns of the copyright owners were well-founded, but the Register has concluded that those concerns can be addressed without denying an exemption that will enable the film professors to engage in the noninfringing uses they have identified. The facts underlying the film professors’ proposal justify a refinement of the approach that has been taken in determining what may be a “particular class of works.” Even though a “class” must begin, as its starting point, by reference to one of the categories of authorship enumerated in section 102 of the

Copyright Act (or a subset thereof), the ways in which that primary classification should be further delineated depend on the specific facts demonstrated in the proceeding. Based on the facts presented with respect to this proposed class of works and based on a review of the statutory text and legislative history, the Register has concluded that given the appropriate factual showing, it is permissible to refine the definition of a “class” of works by reference to particular types of uses and/or users.

If it had not been possible to define a class of works by reference to the users or the uses made of those works, it might have been difficult for the Register to recommend an exemption for this class of works. The Register would have had to make difficult choices between (1) recommending an exemption for a particular class of works that would permit circumvention for a broad ranges of uses, even though the case had been made for only a narrow noninfringing use, and (2) refusing to recognize an exemption for a class because the adverse consequences of a broadly defined class would outweigh the prohibition's adverse effects to a narrow noninfringing use. Refining the exempted class by reference to the users and uses for which a case had been made in this rulemaking proceeding permits the Librarian to designate a class of works that is tailored to the case that was made in the rulemaking but avoids adverse consequences that may result from the recognition of too broad a class. Such an approach is consistent with Congress’s directive that a “particular class of copyrighted works’ [should] be a narrow *and focused* subset of the broad categories of works of authorship identified in section 102.”

In this case, the proposed class should be refined by reference to both the user and the use, as follows: “when circumvention is accomplished for the purpose of making compilations

of portions of those works for educational use in the classroom by media studies or film professors.”

2. 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, when circumvention is accomplished for the purpose of preservation or archival reproduction of published digital works by a library or archive. A format shall be considered obsolete if the machine or system necessary to render perceptible a work stored in that format is no longer manufactured or is no longer reasonably available in the commercial marketplace.

The Internet Archive, along with some supporting commenters, proposed an exemption that is identical to the classes of works exempted in the 2003 Rulemaking proceeding. There was no direct opposition to this request, apart from a concern by copyright owners that many old video games and computer programs are being reintroduced into the market in new ways by their copyright owners, who wished to exclude from the exemption video games that have been re-released on a new gaming platform because circumvention of access controls would cause significant harm to copyright owners in their exploitation of these re-released works. The copyright owners stated that they appreciated that the Internet Archive is solely interested in preservation and archival use, which would not necessarily be harmful to copyright owners’ interests. Yet, they argued, because the exemption is not limited by reference to the specific use or user, the effect of the exemption could extend well beyond the specific use that served as the basis of the exemption, i.e., archival and preservation use.

Because the particular noninfringing use sought by the Internet Archive that serves as the sole basis for this exemption is preservation and archival use, and because the Register has determined that in appropriate cases, the definition of a class of works may be refined by reference to particular kinds of users and/or uses, the concerns of copyright owners can be

addressed by such a refinement, which also meets the case presented by the Internet Archive. The Internet Archive established that its archival and preservation activities are noninfringing and that 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 (e.g., that the original floppy diskette must be inserted into a computer's disc drive in order for the program to operate) constitute works protected by access controls. Without the ability to circumvent those "original-only" access controls, the Internet Archive could not engage in its preservation and archival activities with respect to those works. Therefore, the Register recommends renewal of this exemption.

The Internet Archive also sought an exemption for a second proposed class: "Computer programs and video games distributed in formats that require obsolete operating systems or obsolete hardware as a condition of access." The Register cannot recommend adoption of an exemption for this proposed class because it does not involve access controls and, therefore, no exemption is needed. This is, in fact, consistent with the request of the Internet Archive, which sought designation of the second class "only if, and only to the extent that, the Copyright Office determines that such practical restrictions on access created by the lack of backward compatibility in new software and hardware platforms constitute 'technological protection measures' within the meaning of the Digital Millennium Copyright Act." The fact that the creators of the computer programs and video games in question designed them to run on particular operating systems or particular hardware does not make the operating system or hardware "technological measures that control access to works." Section 1201 addresses technological measures that copyright owners place on works *in order to* restrict access to those

who are not authorized to gain access. There is no suggestion in the record that the operating systems and hardware in question are such technological measures. Because organizations such as the Internet Archive do not violate § 1201(a)(1)(A) when they take measures to make such computer programs and video games run on new operating systems or hardware, there is no need to designate a class for exemption from the operation of § 1201(a)(1)(A).

3. Computer programs protected by dongles that prevent access due to malfunction or damage and which are obsolete. A dongle shall be considered obsolete if it is no longer manufactured or if a replacement or repair is no longer reasonably available in the commercial marketplace.

A number of commenters proposed the renewal of an existing exemption from 2003, which in turn was a modified version of one of the exemptions from the first rulemaking in 2000. As described in the first rulemaking, “[the] issue relates to the use of ‘dongles,’ hardware locks attached to a computer that interact with software to prevent unauthorized access to that software.” In both the previous rulemakings, evidence was presented that damaged or malfunctioning dongles can prevent authorized access to the protected software. Because in some instances the software vendors may be unresponsive or have gone out of business, the evidence painted a compelling picture of a genuine problem for authorized users of often-expensive computer programs who lose their ability to gain access to those programs due to malfunctioning or damaged hardware that cannot be replaced or repaired.

The legal and analytical rationale for this exemption remains unchanged. Thus, the key question is whether the evidence in this record supports renewing the exemption for another three years. The Register concludes that a sufficient factual showing was made at the public hearing on this proposed exemption. However, for purposes of clarity and consistency, the description of the class should be refined to include an explanation of what constitutes an

“obsolete” dongle. This is consistent with the existing exemption for “computer programs and video games distributed in formats that have become obsolete and which require the media or hardware as a condition of access.” That class of works includes a second sentence describing when a format is obsolete: “A format shall be considered obsolete if the machine or system necessary to render perceptible a work stored in that format is no longer manufactured or is no longer reasonably available in the commercial marketplace.” A similar explanation should be included in the description of this class.

However, the Register cannot recommend adoption of an expanded exemption sought by one proponent. At the hearing on the proposed class of computer programs protected by dongles, that proponent asked, for the first time, that the class of works be expanded from “Computer programs protected by dongles that prevent access due to malfunction or damage and which are obsolete” to “Computer programs protected by dongles that prevent access due to malfunction or damage *or hardware or software incompatibilities or require obsolete operating systems or obsolete hardware as a condition of access.*” (Emphasis added.) That request was untimely. The purpose of the hearing, at a relatively late stage of the proceedings, is not to accept new proposals for exemptions or to entertain requests for expanded versions of exemptions that were proposed in a timely manner, but rather to give proponents and opponents of exemptions an opportunity to summarize the facts and arguments that have already been presented in written comments, to draw attention to those facts and arguments that they believe are most pertinent in the time allotted for the hearing, to respond to questions from the Register and her staff, and, if appropriate and applicable, to demonstrate some of the facts related in the written comments.

4. Literary works distributed in ebook format when all existing ebook editions of the work (including digital text editions made available by authorized entities) contain access controls that prevent the enabling either of the book's read-aloud function or of screen readers that render the text into a specialized format.

A number of commenters, led by the American Foundation for the Blind, proposed renewal of an existing exemption for ebooks for which the "screen readers" and the "read-aloud" function have been disabled. These functions enable the blind to "read" the text of an ebook by rendering the written text of the book into audible, synthetic speech. Screen readers also allow the text and layout of a text screen to be conveyed spatially so that a blind user can perceive the organization of a page on the screen or even the organization of a work as a whole and navigate through that ebook.

Some literary works are distributed in ebook form with the read-aloud and screen reader functions disabled through the use of digital rights management tools. In order to alter the usage settings of such ebooks in order to enable read-aloud and screen reader functionality, a user would have to circumvent access controls.

The proponents of this exemption selected a sample of five titles and conducted only a limited examination of the options available even for those five titles – a minimal showing at best. However, the Register has concluded that the proponents have met their burden, if only barely. Especially in light of the fact that nobody, including the copyright owners whose works would be subject to this exemption, has urged rejection of the proposed exemption, the Register recommends renewal of the exemption.

However, proponents of the exemption have made a persuasive argument for a minor modification of the existing exemption, which currently is applicable only if there is no ebook edition of the work that contains access controls that prevent the enabling *both* of the ebook's

read-aloud function *and* of screen readers. Because of the limited functionality of the read-aloud function on ebooks and the ability that screen readers offer to the blind to actually navigate within an ebook, the Register is persuaded that the exemption should be applicable to a literary work when all existing ebook editions of the work (including digital text editions made available by authorized entities) contain access controls that prevent the enabling *either* of the book's read-aloud function *or* of screen readers that render the text into a specialized format. In other words, if there is no screen reader functionality or no read-aloud functionality, the exemption will apply.

5. Computer programs in the form of firmware that enable wireless telephone handsets to connect to a wireless telephone communication network, when circumvention is accomplished for the sole purpose of lawfully connecting to a wireless telephone communication network.

The Wireless Alliance and Robert Pinkerton proposed an exemption for “Computer programs that operate wireless communications handsets.” The proponents of this exemption stated that providers of mobile telecommunications (cellphone) networks are using various types of software locks in order to control customer access to the “bootloader” programs on cellphones and the operating system programs embedded inside mobile handsets (cellphones). These software locks prevent customers from using their handsets on a competitor's network (even after all contractual obligations to the original wireless carrier have been satisfied) by controlling access to the software that operates the mobile phones (*e.g.*, the mobile firmware).

Many reply comments were submitted in support of this exemption and only one reply comment provided any opposition to the proposal. Only two witnesses testified at the hearing on this issue: a representative of the principal proponent of the exemption and a representative of some copyright owners (none of whom operate wireless telecommunication services,

manufacture wireless handsets or make bootloader or operating system programs for cellphones).

It was undisputed that mobile handset consumers who desire to use their handsets on a different telecommunications network are often precluded from doing so unless they can obtain access to the bootloader or operating system within the handset in order to direct the phone to a different carrier's network. The evidence demonstrated that most wireless telecommunications network providers do not allow a consumer to obtain such access in order to switch a cell phone from one network to another, and that the consumer could not use the cell phone with another carrier, even after fulfilling his or her contractual obligations with the carrier that sold the phone. In order to switch carriers, the consumer would have to purchase a new phone from a competing mobile telecommunications carrier.

The obstacle that prevents customers from using lawfully acquired handsets on different carriers is the software lock. At least one wireless telecommunications service has filed lawsuits alleging that circumvention of the software lock is a violation of section 1201(a)(1)(A) and has obtained a permanent injunction (albeit by stipulation).

The Register has concluded that the software locks are access controls that adversely affect the ability of consumers to make noninfringing use of the software on their cellular phones. Moreover, a review of the four factors enumerated in § 1201(a)(1)(C)(i)-(iv) supports the conclusion that an exemption is warranted. There is nothing in the record that suggests that the availability for use of copyrighted works would be adversely affected by permitting an exemption for software locks. Nor is there any reason to conclude that there would be any impact – positive or negative – on the availability for use of works for nonprofit archival, preservation, and educational purposes or on the ability to engage in criticism, comment, news

reporting, teaching, scholarship, or research. Nor would circumvention of software locks to connect to alternative mobile telecommunications networks be likely to have any effect on the market for or value of copyrighted works. The reason that these four factors appears to be neutral is that in this case, the access controls do not appear to actually be deployed in order to protect the interests of the copyright owner or the value or integrity of the copyrighted work; rather, they are used by wireless carriers to limit the ability of subscribers to switch to other carriers, a business decision that has nothing whatsoever to do with the interests protected by copyright. And that, in turn, invokes the additional factor set forth in § 1201(a)(1)(C)(v): “such other factors as the Librarian considers appropriate.” When application of the prohibition on circumvention of access controls would offer no apparent benefit to the author or copyright owner in relation to the work to which access is controlled, but simply offers a benefit to a third party who may use § 1201 to control the use of hardware which, as is increasingly the case, may be operated in part through the use of computer software or firmware, an exemption may well be warranted. Such appears to be the case with respect to the software locks involved in the current proposal.

The copyright owners who did express concern about the proposed exemption are owners of copyrights in music, sound recordings and audiovisual works whose works are offered for downloading onto cellular phones. They expressed concern that the proposed exemption might permit circumvention of access controls that protect their works when those works have been downloaded onto cellular phones. The record on this issue was fairly inconclusive, but in any event the proponents of the exemption provided assurances that there was no intention that the exemption be used to permit unauthorized access to those works. Rather, the exemption is

sought for the sole purpose of permitting owners of cellular phone handsets to switch their handsets to a different network.

Because the Register has concluded that, in appropriate circumstances, a class of works may be refined by reference to uses made of the works, this issue can best be resolved by modifying the proposed class of works to extend only to “Computer programs in the form of firmware that enable wireless telephone handsets to connect to a wireless telephone communication network, when circumvention is accomplished for the sole purpose of lawfully connecting to a wireless telephone communication network.”

On September 18, 2006, long after the comments had been submitted and the hearings had been conducted in this rulemaking, the Register received unsolicited submissions from CTIA - The Wireless Association (a nonprofit trade association that promotes the interests of the wireless industry, representing both wireless carriers and manufacturers) and TracFone Wireless, Inc. (which describes itself as “America’s largest prepaid wireless company”). The submissions included the submitters’ responses to written questions that the Copyright Office had submitted to the two witnesses who had testified at the March 23, 2006, hearing on the proposed exemption – witnesses who had no relationship with Tracfone or CTIA. The submissions also contained arguments opposing the proposed exemption.

In the course of his consultation with the Register of Copyrights on this rulemaking, the Acting Assistant Secretary of Commerce for Communications and Information shared his concern that the record on this proposal appeared to be incomplete and stated that he was pleased that the Register had sought additional information (in the form of the written questions to the witnesses) to supplement the record. Subsequently, he expressed to the Register his view that

the CTIA and TracFone comments “afford you a complete record in which the views of both users and creators of content are currently represented,” and urged the Register to consider those submissions in making her recommendation.

The Assistant Secretary’s concerns are understandable, and the Register shares his desire that the views of both users and creators of content be represented in the rulemaking. However, complying with the Assistant Secretary’s request and accepting the last-minute submissions of CTIA and TracFone would undermine the procedural requirements of this proceeding and of the rulemaking process in general. While it is preferable that all interested parties make their views known in the rulemaking process, they must do so in compliance with the process that is provided for public comment, or offer a compelling justification for their failure to do so. In this case, they have failed to offer such justification. CTIA (which counts TracFone among its members) was aware of this rulemaking proceeding and this request for an exemption as early as January or February, 2006. Yet it remained silent until September 18, long after the opportunities provided for comment and testimony had expired. Nor did it offer any explanation for its silence. If these extremely untimely submissions were accepted, it would be difficult to imagine when it ever would be justified to reject an untimely comment. Such a precedent would be an invitation to chaos in future rulemakings. Therefore, the late submissions of CTIA and TracFone have not been considered.

6. Sound recordings, and audiovisual works associated with those sound recordings, distributed in compact disc format and protected by technological protection measures that control access to lawfully purchased works and create or exploit security flaws or vulnerabilities that compromise the security of personal computers, when circumvention is accomplished solely for the purpose of good faith testing, investigating, or correcting such security flaws or vulnerabilities.

A number of commenters sought an exemption based on facts arising out of the distribution, by Sony BMG Music Entertainment, of compact discs (CDs) which employed certain digital rights management (“DRM”) software that created security vulnerabilities on computers on which the software was installed. Specifically, they identified SunnComm’s MediaMax content protection software and First4Internet’s XCP copy protection software program. The leading proponents of such an exemption, Edward W. Felten, Professor of Computer Science and Public Affairs at Princeton University, and J. Alex Halderman, a graduate student at Princeton, proposed a class of “sound recordings and audiovisual works distributed in compact disc format and protected by technological measures that impede access to lawfully purchased works by creating or exploiting security vulnerabilities that compromise the security of personal computers.”

The evidence in the record demonstrated that MediaMax and XCP controlled access to the sound recordings (as well as some related audiovisual works, such as music videos) on a number of CDs distributed in 2005 and, as a consequence, ended up being installed on perhaps half a million computer networks worldwide. The evidence also established that these access controls created security vulnerabilities on the personal computers on which they were installed. For example, XCP includes a “rootkit” which cloaks the existence of other aspects of the XCP digital rights management software (a music player application and a device driver). The rootkit creates security vulnerabilities by providing a cloak that conceals malicious software, a cloak that, in fact, was exploited by disseminators of malware within days of the discovery of the XCP rootkit.

Copyright owners opposed the proposed exemption primarily on the ground that they believe there already exists a statutory exemption that permits circumvention of access controls “for the purpose of good faith testing, investigating, or correcting, a security flaw or vulnerability, with the authorization of the owner or operator of such computer, computer system, or computer network.” *See* 17 U.S.C. § 1201(j). But while it appears that this statutory exemption may permit circumvention in cases such as those involving MediaMax and XCP, it is not clear whether that provision extends to such conduct. In light of that uncertainty and the seriousness of the problem, the Register recommends that the Librarian designate a class of works consisting of sound recordings, and audiovisual works associated with those sound recordings, distributed in compact disc format and protected by technological protection measures that control access to lawfully purchased works and create or exploit security flaws or vulnerabilities that compromise the security of personal computers, when circumvention is accomplished solely for the purpose of good faith testing, investigating, or correcting such security flaws or vulnerabilities. The restriction of the exemption to cases where the purpose of circumvention is to engage in good faith testing, investigating, or correcting of security flaws or vulnerabilities is language taken directly from § 1201(j), in recognition of Congress’s judgment that in such cases, the privilege to circumvent should extend only to conduct directed at the security flaws or vulnerabilities that justify the exemption in the first place.

B. Other Exemptions Considered, But Not Recommended

A number of other proposed exemptions were considered, but rejected. They are briefly discussed below. Similar proposed exemptions are discussed together.

1. Compilations consisting of lists of Internet locations blocked by commercially marketed filtering software applications that are intended to prevent access to

domains, websites or portions of websites, but not including lists of Internet locations blocked by software applications that operate exclusively to protect against damage to a computer or a computer network or lists of Internet locations blocked by software applications that operate exclusively to prevent receipt of email.

This proposal is for the renewal of an existing exemption from 2003, which in turn was a modified version of one of the original exemptions from the 2000 rulemaking. As in the previous two rulemakings, initial comments proposed an exemption to the prohibition on circumvention in order to access the lists of blocked websites or Internet addresses that are used in various filtering software programs sometimes referred to as “censorware.” These programs are intended to prevent children and other Internet users from viewing objectionable material while online. It has been alleged that although the software is intended to serve a useful societal purpose, the emphasis of the programs is on robust blocking rather than accuracy. Critics contend that the result of this focus is that this type of filtering software tends to over-block, thereby preventing access to legitimate informational resources. Proponents of the exemption (both previously and again this year) wish to legalize the circumvention of the technology which controls access to lists of blocked Internet locations and thus adversely affects one’s ability to comment on and criticize the lists of sites blocked by the technological protection measure.

Although the notice of proposed rulemaking made clear that proponents of renewal of an existing exemption must make their case de novo, proponents in the current rulemaking proceeding made no attempt to make any factual showing whatsoever, choosing instead to rest on the record from three years ago and argue that the existing exemption has done no harm, that nothing has changed to suggest the exemption is no longer needed, and that if anything, the use of filtering software is on the rise. In a rulemaking proceeding that places the burden of coming

forward with facts to justify an exemption for the ensuing three-year period on proponents, one cannot assume that the elements of the case that was made three years ago remain true now. Nor is there any evidence in the record that there has been any use of the exemption in the past three years, or that there would be likely to be any use of an exemption during the next three years. While this is not necessarily fatal, nevertheless a record that reveals no use of an existing exemption tends to indicate that the exemption is unnecessary. Together, the absence of any quantification of the current scope of the problem along with the absence of any demonstration that the existing exemption has offered any assistance to noninfringing users leaves a record that provides no basis to justify a recommendation for renewal of the exemption.

2. Space-shifting.

A number of commenters sought an exemption for an activity that is referred to by some of those commenters generally as “space-shifting.” In essence, these commenters sought an exemption to permit circumvention of technological protection measures applied to audiovisual and musical works in order to copy these works to other media or devices and to access these works on those alternative media or devices. In most cases, the comments did not identify the particular technological measures; indeed, in most cases it was unclear whether the commenters were referring to access controls or copy controls, or simply to incompatibility of formats.

Many of the commenters claimed that their space-shifting of the works and their access to those works on an alternative device were noninfringing uses and that technological restrictions were impeding their ability to engage in a noninfringing use. Yet these commenters uniformly failed to cite legal precedent that establishes that such space-shifting is, in fact, a noninfringing use. The Register concludes that the reproduction of those works onto new

devices is an infringement of the exclusive reproduction right unless some exemption or defense is applicable. In the absence of any persuasive legal authority for the proposition that making copies of a work onto any device of the user's choosing is a noninfringing use, there is no basis for recommending an exemption to the prohibition on circumvention.

3. DVDs that cannot be viewed on Linux operating systems.

Some commenters proposed an exemption to allow circumvention of CSS in order to use their computers running the Linux operating system to view motion pictures on DVDs. DVDs protected by CSS may be played only on authorized DVD players licensed by the DVD Copy Control Association (DVD-CCA). Proponents of an exemption assert that there is no licensed player available for the Linux operating system. However, there is evidence in the record that Linux-based DVD players currently exist. Moreover, there are many readily available ways in which to view purchased DVDs. Standard DVD players that can connect to televisions have become inexpensive and portable DVD players have decreased in price. Similarly, Linux users can create dual-boot systems on their computers in order to use DVD software that is compatible with, for example, the Microsoft operating system. There are also alternative formats in which to purchase the motion pictures contained on DVDs.

Due to these alternative options for access and use by consumers, there is no reason to conclude that the availability for use of the works on DVDs is adversely affected by the prohibition. An exemption is not warranted simply because some uses are unavailable in the particular manner that a user seeks to make the use, when other options are available. If a user may access the DVD in readily-available alternative ways or may purchase the works in alternative formats, the need for the exemption becomes simply a matter of convenience or

preference. The proposal by users of the Linux operating system is a matter of consumer preference or convenience that is unrelated to the types of uses to which Congress instructed the Librarian to pay particular attention, such as criticism, comment, news reporting, teaching, scholarship, and research as well as the availability for use of works for nonprofit archival, preservation and educational purposes. The Register cannot recommend an exemption for this class of works.

4. Region Coded DVDs.

Two commenters sought an exemption to permit circumvention in order to obtain access to motion pictures protected by region coding, a technological protection measure contained on many commercially distributed DVDs that limits access to the content on DVDs to players coded for the same geographical region. On a more extensive record, such an exemption was denied three and six years ago. The reasoning behind the denial of the exemption in 2000 and 2003 appears to be equally valid today: Region coding imposes, at most, an inconvenience rather than actual or likely harm, because there are numerous options available to individuals seeking access to content from other regions. Consumers who wish to view DVDs from other regions have a number of inexpensive options other than circumvention, including obtaining DVD players, including portable devices, set to play DVDs from other regions and obtaining DVD-ROM drives for their computers, and setting those drives to play DVDs from other regions. Region coding of audiovisual works on DVDs serves legitimate purposes as an access control, such as preventing the marketing of DVDs of a motion picture in a region of the world where the motion picture has not yet been released in theaters, or is still being exhibited in theaters.

In light of the *de minimis* showing made in support of the proposed exemption, the Register recommends rejection of this proposed class.

5. Computer programs protected by mechanisms that restrict their full operation to a particular platform or operating system.

Two commenters asserted that certain lawfully obtained computer programs do not work properly when operating systems are upgraded. The brief comments submitted on this issue failed to present sufficient evidence from which to conclude that technological measures that control access to works are interfering with the ability of users of copyrighted works to make noninfringing uses. No exemption can be recommended in this case because insufficient information has been presented to understand the nature of the problem or even the relevance of § 1201(a)(1).

6. Computer games and software with Copy Protections that prevent legitimate users from installing and using games and programs.

One commenter, in a one-page comment, stated that some copy protection systems create problems with the installation or using of computer games or programs, specifically citing SecureRom and StarForce as examples of such systems. The commenter did not present any evidence that the adverse effect articulated is the result of an access control. There is not sufficient evidence in the record to understand the problem adequately, to know whether the prohibition is the cause of the problem, or to know whether an exemption is warranted.

7. Literary works distributed in electronic audio format by libraries.

One commenter stated that an exemption should issue for circumvention of literary works distributed in electronic audio format by libraries, because although libraries lend downloadable versions of audio books, they require special software in order to use the legally checked-out

downloaded books. However, the commenter did not identify any technological measures that control access to the literary content of the digital books, nor does it explain how such measures are creating problems for users. His complaint appeared to be about software incompatibility.

In any event, it appears that the technology in question is the type of use-facilitating technology the DMCA was enacted to encourage. It would appear that the deployment of such technology actually results in greater access to copyrighted works by enabling libraries to engage in online lending that they would not otherwise be able to conduct without infringing the copyrights of the books that they distribute online. The Register cannot recommend an exemption.

8. All works and fair use works.

Many commenters stated that the DMCA adversely affects consumer rights and that all works should be exempt for a variety of purposes. These commenters have not articulated a sufficient class or provided sufficient evidence of adverse effects by the prohibition on noninfringing uses that would allow the articulation of a cognizable class.

9. All works protected by access controls that prevent the creation of back-up copies.

A number of commenters sought an exemption for a class that, while described in various ways, can be summarized as “works protected by access controls that prevent the creation of back-up copies.” Proponents made assertions such as that it is common sense to make back-up copies of expensive media such as CDs and DVDs due to their alleged fragility.

However, the proponents offered no legal arguments in support of the proposition that the making of backup copies is noninfringing, and the Register is aware of no authority (apart from section 117 of the Copyright Act, which relates to computer programs) in support of that notion.

Nor did proponents offer facts that would warrant a conclusion that media such as DVDs and CDs are so susceptible to damage and deterioration that the practice of making preventive backup copies should be noninfringing.

The unauthorized reproduction of DVDs is already a critical problem facing the motion picture industry. Creating an exemption to satisfy the concern that a DVD may become damaged would sanction widespread circumvention to facilitate reproduction for works that are currently functioning properly. The Register finds that the record does not justify the proposed exemption.

10. Audiovisual works and sound recordings protected by a broadcast flag.

A number of comments assert that broadcast flags for television and radio broadcasts would interfere with time shifting, format-shifting, and recording for personal use. However, there is currently no broadcast flag mandate for either television or radio broadcasts and whether such a mandate will exist within the next three years is a matter of speculation. If it does exist, it will be due in whole or in part to Congressional action. Moreover, even if an audio or television broadcast flag were to be established, the precise substance of the requirement is unknown at this time. The Register cannot recommend an exemption based upon speculation about a legal regime that may or may not be imposed in the next three years.

11. Miscellaneous Proposals.

A number of individual comments, each of one page or less, were submitted that do not fall into any of the categories noted above. In each case, the proponent failed to provide information that would justify an exemption. These proposals include “any copyrighted work which has been available for purchase for more than one year”; “any digital work” for the

purpose of overriding End User License Agreements (“EULAs”) containing terms which prohibit comment and criticism; access controls used by satellite television services; “computer games and software”; “any works in digital or electronic format which, due to their access controls, prevent the user from being able to access the user-created content”; and “Digital Broadcasts which employ measures that protect ‘access’ to copyrighted works which disable, prevent, or otherwise make impossible, time-shifting of programs.” None of these comments presented sufficient facts or justification to warrant an exemption.

IV. Conclusion

Having considered the evidence in the record, the contentions of the parties, and the statutory objectives, the Register of Copyrights recommends that the Librarian of Congress publish the six classes of copyrighted works designated above, so that the prohibition against circumvention of technological measures that effectively control access to copyrighted works shall not apply to persons who engage in noninfringing uses of those particular classes of works.

Dated: November 17, 2006

Marybeth Peters,
Register of Copyrights.

Determination of the Librarian of Congress

Having duly considered and accepted the recommendation of the Register of Copyrights that the prohibition against circumvention of technological measures that effectively control access to copyrighted works shall not apply to persons who engage in noninfringing uses of the six classes of copyrighted works designated above, the Librarian of Congress is exercising his

authority under 17 U.S.C. 1201(a)(1)(C) and (D) and is publishing as a new rule the six classes of copyrighted works that shall be subject to the exemption found in 17 U.S.C. 1201(a)(1)(B) from the prohibition against circumvention of technological measures that effectively control access to copyrighted works set forth in 17 U.S.C. 1201(a)(1)(A) for the period from **[date of publication in the Federal Register]** through October 27, 2009.

List of Subjects in 37 CFR 201

Copyright, Exemptions to prohibition against circumvention.

Final Regulations

For the reasons set forth in the preamble, 37 CFR part 201 is amended as follows:

PART 201 – GENERAL PROVISIONS

1. The authority citation for part 201 continues to read as follows:

Authority: 17 U.S.C. 702

2. Section 201.40 is amended by revising paragraphs (b) and (c) to read as follows:

§ 201.40 Exemption to prohibition against circumvention.

* * * * *

(b) Classes of copyrighted works. Pursuant to the authority set forth in 17 U.S.C. 1201(a)(1)(C) and (D), and upon the recommendation of the Register of Copyrights, the Librarian has determined that during the period from **[date of publication in Federal Register]** through October 27, 2009, the prohibition against circumvention of technological measures that effectively control access to copyrighted works set forth in 17 U.S.C. 1201(a)(1)(A) shall not apply to persons who engage in noninfringing uses of the following six classes of copyrighted works:

(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 those works for educational use in the classroom by media studies or film professors.

(2) Computer programs and video games distributed in formats that have become obsolete and which require the original media or hardware as a condition of access, when circumvention is accomplished for the purpose of preservation or archival reproduction of published digital works by a library or archive. A format shall be considered obsolete if the machine or system necessary to render perceptible a work stored in that format is no longer manufactured or is no longer reasonably available in the commercial marketplace.

(3) Computer programs protected by dongles that prevent access due to malfunction or damage and which are obsolete. A dongle shall be considered obsolete if it is no longer manufactured or if a replacement or repair is no longer reasonably available in the commercial marketplace.

(4) Literary works distributed in ebook format when all existing ebook editions of the work (including digital text editions made available by authorized entities) contain access controls that prevent the enabling either of the book's read-aloud function or of screen readers that render the text into a specialized format.

(5) Computer programs in the form of firmware that enable wireless telephone handsets to connect to a wireless telephone communication network, when circumvention is accomplished for the sole purpose of lawfully connecting to a wireless telephone communication network.

(6) Sound recordings, and audiovisual works associated with those sound recordings, distributed in compact disc format and protected by technological protection measures that control access to lawfully purchased works and create or exploit security flaws or vulnerabilities that compromise the security of personal computers, when circumvention is accomplished solely for the purpose of good faith testing, investigating, or correcting such security flaws or vulnerabilities.

(c) *Definition.* “Specialized format,” “digital text” and “authorized entities” shall have the same meaning as in 17 U.S.C. 121.

Dated: November 20, 2006

James H. Billington,
The Librarian of Congress,

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