



July 18, 2012

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General Counsel
U.S. Copyright Office
P.O. Box 70400
Washington, DC 20024

Re: Docket No. RM 2011-7
Exemptions to Prohibition on Circumvention of Technological
Measures that Control Access to Copyrighted Works

Dear Mr. Carson:

Thank you for the opportunity to participate in the recent hearings in the Copyright Office's Section 1201 rulemaking proceeding, and for your July 3, 2012 letter with follow-up questions about Class 7.

1. Please state and explain your position as to whether and why (or why not) one who uses the current version of any of the above named screen capture products in order to copy all or part of a copyrighted motion picture "circumvent[s] a technological measure that effectively controls access to a work protected by this title" in violation of 17 U.S.C. § 1201(a)(1)(A).

1. Screen Capture Does Not Violate Section 1201

The status of screen capture software under Section 1201 is difficult to address with specificity because we do not have access to the proprietary technical details of the software in question.¹ Nor does the average remix video artist.

Nonetheless, based on the information we have been able to gather, we do not believe the use of screen capture software violates 17 U.S.C. § 1201(a)(1)(A). Although this technology records digital rather than analog data, screen capture software is conceptually similar to recordings that are made after the motion picture has been output in standard analog video formats, or displayed on monitors.² As a variety of witnesses in previous rulemakings have noted, such recordings are outside the scope of the DMCA's anti-circumvention provisions because, at the point where the recording is made, there is

¹ Indeed, one of the companies we contacted specifically declined to give us any information regarding its software, citing trade secret concerns.

² See generally Douglas C. Sicker et al., *The Analog Hole and the Price of Music: An Empirical Study*, 5 J. ON TELECOMM. & HIGH TECH. L. 573, 577 (2007).

no encryption or other access control triggering those provisions.³ This limit on copyright holders' ability to use technical measures to control end-uses is popularly called "the analog hole."

Recording in this manner lies outside the purview of Section 1201(a)(1)(A) for at least three reasons:

- Analog video is presented in an open-standard format; there is no "technological measure" in the sense of § 1201(a)(3)(A), and recording does not entail "descramb[ing]", "decrypt[ing]", "avoid[ing]", "bypass[ing]", "remov[ing]", "deactivat[ing]", or "impair[ing]" anything;
- There is no "effective[] control[]" in the sense of § 1201(a)(3)(B) because there is no "application of information, or a process or a treatment, with the authority of the copyright holder" required to make a recording;
- Section 1201(c)(3) makes clear that recording technologies that "do[] not otherwise fall within" the anticircumvention rules need not "provide for a response to any particular technological measure."

Put another way, information originating inside a system involving a "technical measure" is potentially regulated by Section 1201(a) after being rendered or output only if the form in which it is rendered or output itself involves a "technical measure" within the meaning of the DMCA.

Like video capture using the "analog hole," screen capture acts on unencrypted data. A developer of the Replay Video Capture ("RVC") software emphasized this fact to us:

[Replay Video Capture] captures video and audio using Windows software methods published by Microsoft for general programming use. All these methods are in the public domain. This software will only capture video or audio that is not encrypted or scrambled. In the event the video and/or the audio are encrypted or scrambled in any way RVC does not implement any decryption or descrambling methods. Video is captured by copying the color of the pixels from the computer screen, audio is

³ See *Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies: Hearing Before U.S. Copyright Office*, 109th Cong. 56-57 (testimony of Fritz Attaway, Motion Picture Association of America), available at <http://www.copyright.gov/1201/2006/hearings/transcript-april03.pdf>; see also *The Analog Hole: Can Congress Protect Copyright and Promote Innovation?: Hearing Before the S. Comm. on the Judiciary*, 109th Cong. 8 (2003) (testimony of Gigi Sohn, President, Public Knowledge), available at <http://www.publicknowledge.org/pdf/gbsohn-testimony-20060621.pdf>.

captured by using a data stream that returns the speaker sound provided by the computer manufacturer.

Statement of Alex Urich (on file with EFF). Acquiring “the color of the pixels from the computer screen” at a particular point in time (a process often compared to taking a screen shot) is a digital process, so recording with RVC is not literally an instance of the analog hole. But like an analog hole recording technique, RVC records only information that is already in a decrypted form. Thus, there is no “application of information, or a process or a treatment, with the authority of the copyright holder” involved. Indeed, RVC does not appear to interact with any software; it does not even know what it is recording or when playback of particular works begins or ends.

Moreover, although they incorporate portions of the same copyrighted audiovisual work, the results of screen capture are never the “same digital file” as the original. The digital original is represented in a particular video file container format and is encoded in a particular video codec (a compression technology), most likely a lossy codec (that is, one that compresses by discarding some data), and is rendered by a particular implementation of that codec, which may introduce digital playback artifacts.

2. Screen Capture Remains an Inadequate Alternative for Remix Artists

The above characteristics of screen capture help explain why screen capture is not an adequate alternative for remix video artists. A screen capture tool simply records, to the best of its ability, a series of frames as they were actually rendered on the user’s screen, saving these in a new video file, in a different format, with or without compression, and potentially incorporating new video artifacts. In the process, it may also miss or drop frames, among other changes. Screen capture also does not record any metadata or alternative video content that was present in the original digital video file or medium, including closed captions, alternative camera angles, and alternative language audio tracks, which could have been obtained by decrypting the original medium. Instead, it stitches together a new video file representing its attempt to capture the particular pixels that were actually displayed on the computer’s screen during one particular playback — including pauses if playback was paused, fast-forwarding if playback was fast-forwarded, and conceivably windows or pop-ups that were superimposed on the video while it was played back.

We will not reiterate the extensive testimony already submitted regarding video quality, but, simply put, decryption affords access to every frame, with no additional digital rendering artifacts, and to all digital metadata. Screen capture creates a new digital file representing particular frames as they were rendered to screen on a particular occasion. In many instances remix artists will not be able to use such files to accomplish their transformative purposes because it would significantly impair to quality of the final work.

Finally, we note that (a) technologies change rapidly, which means that legal status of a given software product; and (b) copyright owners other than those participating in this proceedings may have differing views about whether Section 1201 forbids use of screen capture software. Most remix artists lack the legal and technical expertise to navigate this shifting and complex landscape, and they also lack the resources to obtain that expertise. Thus, no matter what the Copyright Office concludes about the legal status of any particular screen capture software, and no matter what the opponents of Class 7 concede in this rulemaking, screen capture software is unlikely to be a practical alternative for remix artists.

2(C): What would be the effect and advisability of requiring, as a precondition for benefitting from an exemption for documentary filmmakers, that the documentary filmmaker must have a good faith intention to obtain errors and omissions insurance prior to distribution and/or public performance of the film and that, prior to any distribution to the public or any public performance of a film, the documentary filmmaker must have obtained errors and omissions insurance?

At the hearings, some members of the panel expressed an interest in considering certain works as documentaries rather than as members of Classes 7B/7C, “primarily noncommercial videos that do not infringe copyright.” Thus, works such as the Prime Time Terror video created on commission by remix artist Joe Sabia for the nonprofit Lear Center and the In the Cut website’s shot-by-shot film analyses might be considered documentaries. We believe that a documentary exception could indeed be drafted to cover such works, but it could not do so if it also included an insurance requirement. Remix artists and film critics generally do not see themselves as documentarians, do not send their work to film festivals for public performance, and do not use other distribution mechanisms where insurance is an ordinary part of the process. They would not know about, could not afford, and could not use an exception that depended on seeking insurance. If the Office intends for works of political speech and cultural analysis like Prime Time Terror and In the Cut to be covered by Class 7D, it should ensure that the interaction between its definition of documentaries and any proposed external gatekeeping requirements does not inadvertently exclude them.

EFF may offer further testimony regarding the quality of images submitted by opponents of Class 7 in response to question 3.

Sincerely,



Corynne McSherry
Intellectual Property Director