UNITED STATES COPYRIGHT OFFICE



[X] Check here if multimedia evidence is being provided in connection with this comment

ITEM A. COMMENTER INFORMATION

Commenters:

DVD Copy Control Association

The DVD Copy Control Association ("DVD CCA"), a not-for-profit corporation with its principal office in Morgan Hill, California, licenses the Content Scramble System ("CSS") for use to protect against unauthorized access to or use of prerecorded video content contained on DVD discs. Its licensees include the owners of such content and the related authoring and disc replicating companies; producers of encryption engines, hardware and software decrypters; and manufacturers of DVD players and DVD-ROM drives

Advanced Access Content System Licensing Administrator

The Advanced Access Content System Licensing Administrator, LLC ("AACS LA"), is a cross-industry limited liability company with its principal offices in Beaverton, Oregon. The Founders of AACS LA are Warner Bros., Disney, Microsoft, Intel, Toshiba, Panasonic, Sony, and IBM. AACS LA licenses the Advanced Access Content System ("AACS") technology that it developed for the protection of high definition audiovisual content distributed on optical media. That technology is associated with Blu-ray Discs ("BDs").

As ultra-high definition products are entering the marketplace, AACS LA has developed a separate technology for the distribution of audiovisual content. This technology is identified as AACS2 and not AACS 2.0. This distinction in nomenclature is significant as the latter would suggest that it replaced AACS distributed on Blu-ray. It has not. AACS2 serves only audiovisual content distributed on Ultra HD Blu-ray discs, which will not play on (HD) Blu-ray players.

Privacy Act Advisory Statement: Required by the Privacy Act of 1974 (P.L. 93-579)

The authority for requesting this information is 17 U.S.C. §§ 1201(a)(1) and 705. Furnishing the requested information is voluntary. The principal use of the requested information is publication on the Copyright Office Web site and use by Copyright Office staff for purposes of the rulemaking proceeding conducted under 17 U.S.C. § 1201(a)(1). NOTE: No other advisory statement will be given in connection with this submission. Please keep this statement and refer to it if we communicate with you regarding this submission.

Representatives:

Bruce H. Turnbull Turnbull Law Firm, PLLC 5335 Wisconsin Avenue, NW Suite 440 Washington, DC 20015 202-607-4638 turnbull@bhtlawfirm.com David J. Taylor Right Size Law, PLLC 621 G Street, SE Washington, DC 20003 202-546-1536 david.taylor@rightsizelaw.com

Counsel to DVD CCA and AACS LA

ITEM B. PROPOSED CLASS ADDRESSED

Proposed Class 1 – Motion Pictures

ITEM C. OVERVIEW

DVD CCA and AACS LA object to the proposed modifications to the current temporary exemptions. First, the Electronic Frontier Foundation, New Media Rights, and Organization for Transformative Works (collectively, "EFF")¹ proposes a modification to an existing exemption and Brigham Young University ("BYU") proposes a new exemption, each of which would be impermissibly broad. The permanent exemptions demonstrate that Congress meant any exemption to be limited. The statute governing the creation of temporary exemptions clearly limits any new exemptions to the specifics developed in this rulemaking, consistent with Congressional intent that such exemptions should be narrow and focused. Because the requested exemptions are not supported by the record, these proposals must be denied.

The Joint Filmmakers, Joint Authors and Joint Educators are also proposing that exemptions related to their constituencies be expanded by eliminating the last rulemaking's carefully crafted distinctions. Each of these proposals fails primarily for evidentiary reasons. The Joint Filmmakers have not offered sufficient evidence to conclude that use of motion pictures in non-documentary filmmaking is likely to be noninfringing. The Joint Authors have not proffered any examples of use and even if they had, marketplace realities refute their claim that the prohibition again circumvention has resulted in the alleged harm. Additionally, the Joint Educators have not provided any examples of use in any type of MOOC other than use permitted under the current exemption, which are MOOCs offered by accredited non-profit educational institutions. They also fail to address why the other TEACH Act requirements should be eliminated. Consequently, these proposals must be denied as well.

¹ Film Independent, International Documentary Association, and Kartemquin Educational Films filed a supporting comment for this request.

Finally, many of the alleged uses could in fact be accomplished without circumvention. Screen capture technology now render recordings of motion picture at the same level as DVD quality. Thus, there are alternatives to circumvention for some of the proposed uses.

ITEM D. TECHNOLOGICAL PROTECTION MEASURE(S) AND METHOD(S) OF CIRCUMVENTION

The TPMs of concern to DVD CCA and AACS LA are the Content Scramble System ("CSS") used to protect copyrighted motion picture content on DVDs and the Advanced Access Content System ("AACS") used to protect copyrighted motion picture content on Blu-ray Discs.

ITEM E. ASSERTED ADVERSE EFFECTS ON NONINFRINGING USES

Outline of Argument

I.	EFF's Proposed Revisions to the Existing Exemption Would Create an Impermissibly Broad Categorical Exemption	5
	A. The Proposed Exemption Is a Thinly Disguised, Impermissible Categorical Exemption	5
	B. Broad Categorical Exemptions Are Impermissible Under the Statutory Structure	6
	Statutory Exemptions Are Intentionally Limited	6
	 The Requests Would Go Beyond the Statutory Limitation Requiring Exemptions from This Rulemaking to Apply Only to Those Beneficiaries Specifically Determined Pursuant to the Rulemaking	7
	C. The EFF Proposal Is Impermissibly Broad	8
II.	BYU's Proposed Exemption Is Impermissibly Broad and Is Unnecessary	9
III.	Joint Filmmakers, Joint Authors, and Joint Educators Fail to Provide Sufficient Evidence to Support Their Proposals	
	A. Joint Filmmakers Fail to Present Case to Expand the Exemption	13
	The Proposed Uses in Narrative Films Submitted as Examples in This Proceeding Appear to be Infringing	14
	(a) First Factor - the Purpose and Use Are Not Transformative	14
	(b) Fourth Factor—Harm of the Licensing Market for the Works	17
	(i) Evidence of the Clip License Market - Studios Engage in Clip License Market	17
	(ii) Evidence of the Clip License Market - Public Television, a New Entrant to the Clip License Market	18
	(iii) Filmmakers Recognize the Value of Clip License Market	19
	(iv) No Evidence of the Effects on the Clip License Market	20
	B. Joint Authors Fail to Present a Case to Expand the Exemption	20

	1. Review of the Evidence Presented in the Initial Comments	20
	(a) Fictional Multimedia E-Books	20
	(b) Non-Fiction Multimedia E-Books Not Related to Film Analysis	21
	2. Without Examples of Actual Use Evaluating the Alleged Noninfringing Use Is Impossible	21
	3. TPMs Are Not Causing Any Harm to Multimedia E-Book Format	23
	(a) There Is No Market for Multimedia E-Books	23
	(b) Technological Limitations (Not TPMs) Are Holding Back the Multimedia E-Book Market	24
	(c) Technological Protections Measures Have Not Been Harming the Allegedly Noninfringing Use	27
	(i) The Alleged Harm is Not Distinct, Verifiable and Measurable	27
	(ii) The Alleged Harm is De Minimis	29
	(d) Expanded Exemption Would Harm the Licensing Market	30
	4. Any Exemption Should Include a DRM Requirement	30
	C. Joint Educators' Proposal to Remove MOOC-Related Restrictions Is Not Supported by the Law or Evidence	31
	 Joint Educators Fail to Present Any Use of a Work in a MOOC Offered by Any Other Type of MOOC Other Those MOOCs Offered by Accredited Nonprofit Educational Institutions 	31
	2. Register Should Preserve the Other TEACH Act Requirements	
	(a) "Enrolled Students"	34
	(b) Technological Measures to Prevent Retention and Further Distribution	35
	(c) Policies Regarding Copyright Protection	35
IV.	Proponents Should Not Be Permitted to Make a New or Substantially Revised Case in Chief in Their Reply Submissions	
V.	There Is an Alternative to Circumvention	37
	A. Screen Capture Can Be An Alternative to Circumvention	37
	Screencasting Has Fueled the Improvement in Screen Capture Technology	37
	2. Film Editing Can Clean Up Video Images	
	3. When Screen Capture Is Not Circumvention	
	B. Some Allegedly Noninfringing Activity Can Be Accomplished with Screen Capture	40
	1	_

	1.	Capture	40
	2.	Screen Capture Technology Produces Sufficient Quality for Some	41
		Noninfringing Uses.	41
VI.	Conclu	sion	41

I. EFF's Proposed Revisions to the Existing Exemption Would Create an Impermissibly Broad Categorical Exemption

A. The Proposed Exemption Is a Thinly Disguised, Impermissible Categorical Exemption

EFF's proposal is a not-so-subtle attempt to carve out a categorical exemption, as opposed to the focused, narrow exemptions the Librarian is authorized to create (only where there is sufficient evidence of adverse effects on noninfringing uses of a particular class of works).

EFF seeks the following exemption:

Motion Pictures (including television shows and videos), as defined in 17 U.S.C. 101, where circumvention is undertaken solely in order to make use of short portions of the works for the purpose of criticism or comment, where the motion picture is lawfully made and acquired on a DVD protected by the Content Scrambling System, on a BluRay disc protected by the Advanced Access Control System, via a digital transmission protected by a technological measure, or a similar technological protection measure intended to control access to a work, where the person engaging in circumvention reasonably believes that non-circumventing alternatives are unable to produce the required level of high-quality source material.

In its filing supporting this proposed exemption, EFF seeks to smooth the waters of disagreement by suggesting its major concern is the complexity of the motion picture-related exemptions.² Its solution is to craft an all-encompassing exemption covering any "criticism and comment" uses of short portions of motion pictures where the users reasonably believe that the "required level of high-quality source material" is otherwise unavailable. In reality, this proposal would eliminate carefully drawn distinctions among potential users of motion picture content, moving another giant step closer to what EFF really wants – a categorical exemption from circumvention for all uses that the users reasonably believes are fair uses.

5

_

² EFF's quest for simplicity and clarity is dubious as they admit that sixty-three percent of their surveyed constituencies "didn't know the audiovisual exemptions existed." Comments at 8. This suggests that lack of knowledge about the specifics of the exemption has not been an issue

B. Broad Categorical Exemptions Are Impermissible Under the Statutory Structure

The Register and Librarian should reject the proposals as contrary to the statute and its framework established by Congress. It is axiomatic that the scope of the rulemaking is limited to "the boundaries of [the Librarian's] delegated authority." The boundaries of the delegated authority are defined by the statute's framework. Here, those boundaries are clearly defined by an examination of the statutory exemptions created by Congress, the specific statutory provisions relative to this rulemaking and the explanation of the Congressional intent with regard to this rulemaking.

1. Statutory Exemptions Are Intentionally Limited

Relative to the statutory exemptions, Congress did not import the full statutory limitations on the rights of copyright owners. Instead, it exempted specific activities in narrowly defined terms. For example, section 1201(f) permits an exemption for reverse engineering but it is limited to identification and analysis of programmatic elements. Section 1201(j) permits an exemption for security research provided it is in good faith. Similarly, section 1201(g) provides an even narrower exemption for encryption research.

Congress' decision to create specific and narrow exemptions was intentional. The prohibition under section 1201(a)(1) is a broad prohibition.⁴ Creating broad categories of exemptions would undermine the effectiveness of the prohibition.

for the majority of those who might benefit from the exemption. As far as the list of counseling situations, Comments at 8-9, these simply reflect the fact that the rulemaking responded to the requested petitions within the confines of the statutory requirement for a narrow, focused exemption. The vast majority of exemption beneficiaries will not need to consult counsel and very few of them—if any—will ever require an analysis under each of the eight subcategories as identified by proponents.

³ See Mistretta v. United States, 488 U.S. 361, 373 (1989) (citing American Power & Light Co. v. SEC, 329 U.S. 90, 105 (1946)).

⁴ See, e.g., WIPO Copyright Treaties Implementation and On-Line Copyright Infringement Liability Limitation, H. Rept. 105-551 at 36 (referring to it as a "flat prohibition") ("House Commerce Committee Report"); MDY Industries, LLC v. Blizzard Entertainment, Inc., 629 F.3d 928, 945 (9th Cir. 2010).

Congress also chose not to give the type of relief that these proposals seek. For example, in addressing how the prohibition would affect nonprofit libraries, archives and educational institutions, section 1201(d) creates a very narrow exemption, essentially a "shopping privilege." Section 1201(d) does not have the same breadth that these institutions enjoy vis-à-vis the exclusive rights of the copyright owner.

In making its choices, Congress was fully informed of the possible effects the broad prohibition against circumvention would have on fair use and the education and libraries communities. After discussing the issues facing these communities, the House Commerce Committee stated:

The Committee on Commerce felt compelled to address these risks The Committee has struck a balance that is now embodied in the bill, as reported by the Committee on Commerce. The Committee has endeavored to specify with as much clarity as possible, how the right against anti-circumvention would be qualified to maintain balance between the interests of content creators and information users.

House Commerce Committee Report at 26.6

2. The Requests Would Go Beyond the Statutory Limitation Requiring Exemptions from This Rulemaking to Apply Only to Those Beneficiaries Specifically Determined Pursuant to the Rulemaking

Congress created a temporary exemption for persons in situations where the Librarian has "determined, pursuant to the rulemaking ...," that such persons "are, or are likely to be, adversely affected" by virtue of the circumvention prohibition "in their ability to make noninfringing uses" Section 1201(a)(1). The statute thus limits the rulemaking to exempt people based on the determination resulting from the rulemaking. The plain language of the statute requires identification of the persons who are adversely affected and a determination based on the rulemaking that those adverse effects exist in relation to noninfringing uses. There are to be no beneficiaries of the exemption based on vague references or suggestions.

⁵ United States Copyright Office, Section 1201 of Title 17, A Report of the Register of Copyrights (June 2017) (hereafter cited as "Section 1201 Report") at 14.

⁶ See supra note 4.

The House Commerce Committee, which created the rulemaking during its consideration of the legislation that became Section 1201, did not contemplate a regulatory proceeding in which there would be broad waivers of the prohibition for any fair use under section 107 or for any activity permitted under section 110 (1) (the classroom exemption). Instead, the Committee foresaw "selectively waive[ing] [of the prohibition against circumvention] for limited time periods, . . . for a *particular* category of copyrighted materials." House Commerce Committee Report at 36 (emphasis added).

Not only did the Committee envision an exemption to be selective and particular but that the exemption would be fully evaluated in the rulemaking (in keeping with the statutory requirement that the exemption be "pursuant to the rulemaking" as noted above). The Commerce Committee Report instructs that the exemption resulting from the rulemaking is to flow from the "development of a sufficient record as to how the implementation of these technologies is affecting the availability of works in the marketplace for lawful uses." House Commerce Committee Report at 37. Most importantly, the Committee was quite clear that "the rulemaking proceeding should focus on distinct, verifiable and measurable impacts, should not be based upon *de minimis* impacts" *Id*.at 37.

Congress' final direction was that the category of work be narrow and focused. Again, the House Commerce Report states that a particular class of work should "be a narrow and focused subset of the broad categories of works of authorship than is identified in Section 102 of the Copyright Act (17 U.S.C. § 102)." *Id.* at 38.

C. The EFF Proposal Is Impermissibly Broad

The EFF proposed exemption would enable anyone to circumvent TPMs in order to use short portions of otherwise protected motion pictures for the purpose of criticism or comment, regardless of who the user is, the specific use to be enabled, or the context in which the activity would occur. The breadth of such an exemption and lack of specific focus are contrary to the statutory requirement that the adverse effects and class of works be determined pursuant to the rulemaking. When EFF posits that "there are undoubtedly dozens of other communities that occasionally, with varying but legitimate justifications, make fair use of video that requires circumvention," Comments at 11, it is asking the Librarian to make a determination based on the vaguest of reference to unidentified persons who might be harmed in their effort to make some unidentified "fair use" that is in some unknown way thwarted by the existence of some TPM. An exemption based on such a statement simply cannot be said to be based on the rulemaking.

As noted above, EFF's proposed exemption would enable anyone in any context to circumvent in order to make use of short portions of the motion picture for criticism or comment. EFF argues that its proposal would serve "undoubtedly dozens of other communities that occasionally, with varying but legitimate justifications, make fair use of video that requires circumvention." Comments at 11. Yet, these people have not participated in the proceeding, either directly or through some identified class representative, and are referenced by EFF only in a couple of examples. In the twenty-year history of this rulemaking, those communities that believe themselves to be adversely affected have indeed come to this proceeding requesting relief. The rulemaking has accommodated the requests when the Register and Librarian have concluded the requests warrant relief. Here, however, there is no basis in the record to establish a broad-based exemption based on speculation about who the adversely affected persons are and what their noninfringing uses might be, especially when the exemption proposed to be created is broad and unfocused. For these reasons, the class proposed by EFF is impermissible.

II. BYU's Proposed Exemption Is Impermissibly Broad and Is Unnecessary

BYU seeks to establish a wholly new, overbroad exemption similar to EFF's request. BYU's proposal is as follows:

Motion Pictures (including television shows and videos), as defined in 17 U.S.C. § 101, where circumvention is undertaken solely in order to facilitate noninfringing performances of the works for nonprofit educational purposes, in accordance with 17 U.S.C. § 110(1) or § 110(2).

This proposal is even broader and more categorically stated than EFF's proposal. In the BYU case, there is no reference to the need for high quality nor any limit on the amount of the motion picture that is to be used. It would cover any "nonprofit educational purpose" by any person. As with EFF's proposal, the request does not limit the proposed class of work in the way that Congress intended for this rulemaking.

For the same reasons, BYU's proposed class cannot be granted. The proposal seeks to establish a class where the circumvention will ultimately serve generalized "nonprofit educational purposes," in accordance with 17 U.S.C. § 110(1) or § 110(2). The Register has previously determined that this kind of formulation could not constitute a particular class as it was too broad. 2006 Recommendation at 17. In announcing her new standard for a class of works in the Third Triennial Rulemaking, the Register considered the film professors' petition, which sought an exemption to circumvent for the purpose of classroom teaching. ⁷ The Register started her analysis from the mandate that a "particular class of copyrighted works" be a narrow and focused subset of works of authorship. She noted that prior attempts to define a class by uses such as "fair use works, per se educational fair use works" had been rejected.

_

⁷ Rulemaking on Exemptions from Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies at 19-24 (Nov. 17, 2006) ("2006 Recommendation").

Such proposed classifications did not constitute narrowly focused subsets of categories of works. Instead, these proposals sought to define a "class" primarily or solely by reference to the intended use or user. It remains a sound conclusion that a "class" that is solely or primarily defined by reference to a particular use or a particular user is inconsistent with the legislative language and intent.

2006 Recommendation at 17.

BYU seeks an exemption when "circumvention is undertaken solely in order to facilitate noninfringing performances of the works for nonprofit educational purposes, in accordance with 17 U.S.C. § 110(1) or § 110(2)." BYU's language tracks closely to the proposed classifications the Register has consistently rejected.

As the above implies, the proposed class is not narrowed and focused. The Register explained how such refinements that narrowed and focused the exemption led to a different result under the statutory factors.⁸ The statutory analysis of a class facilitating noninfringing performances for nonprofit educational purposes in accordance with sections 110(1) and 110(2) cannot in any way be resolved as favorably as a class refined by users and their specific uses.

-

the analysis [would likely] be very different for a class of works consisting of all motion pictures on DVDs than it would be for a class of motion pictures in the educational library or 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. This statutorily favored purpose would be more clearly served by an exemption in the latter case than in the former.

Id. at 19-20. This finding would also be true for the third factor (the use of the work for criticism, comment, news reporting, teaching, scholarship, or research). On the final factor (the effect on the market for or value of the work), the Register suggested that "the analysis will be very different depending upon whether that class consists of all motion pictures on DVDs or only of motion pictures used by film and media studies professors for classroom teaching." *Id.* at 20.

⁸ On the first factor (the availability of copyrighted works), the Register found that studios "are not likely to be deterred from releasing works on DVDs" when "the class of works is more narrowly defined, permitting circumvention only by college and university film and media studies professors for classroom teaching[.]" 2006 Recommendation at 19. As for the second factor (the use of works for nonprofit archival, preservation), the Register reasoned,

BYU's language is vague and is unworkable under the statutory factors. But even the most favorable interpretation of the language would still lead to the conclusion that the lack of specificity makes the request resemble the class described as "all motion pictures on DVD" (which has been found to be too broad and vague). The language does not even approach a refined class of the kind where exemptions have been granted, such as the exemption for film studies and other courses requiring close analysis:

In film studies or other courses requiring close analysis of film and media excerpts where the motion picture is lawfully made and acquired on a DVD protected by the Content Scramble System, on a Blu-ray disc protected by the Advanced Access Control System, or via a digital transmission protected by a technological measure, and where the person engaging in circumvention reasonably believes that screen-capture software or other non-circumventing alternatives are unable to produce the required level of high-quality content."

37 CFR § 201.40(b)(1)(iv)(B).

Beyond the impermissible breadth of the BYU proposal, the basis for the BYU request has nothing whatsoever to do with TPMs. The BYU submission claims that, at some point in the future, DVD and Blu-ray players are not going to be found in classrooms or media centers. Comments at 3-4. Accordingly, the submission states that in order to be able to play full-length feature films, including specifically playing them in their entirety, they need to be able to circumvent CSS and AACS to put these films onto media servers. Thus, the basis for the exemption has nothing to do with TPMs but is entirely of BYU's own making. To the extent that performances of entire movies are authorized as BYU suggests, all that is necessary is a DVD or Blu-ray player and a television screen. No circumvention is necessary.

To meet the needs of the changing modern classroom, the DMCA exemption for motion pictures should be expanded to allow nonprofit educational institutions to circumvent technological protection measures solely to facilitate noninfringing performances of the motion pictures. In many cases, such circumvention may necessitate that a copy of the motion picture be stored on a media server or similar device.

BYU Comments at 4.

⁹ BYU states

Equipping BYU with players would not be an undue hardship. A quick check reveals that acquiring a licensed player is a simple, inexpensive exercise. For example, Best Buy offers more than 75 such players for sale, with DVD players at prices as low as \$29.99 and Blu-ray players at prices as low as \$69.99. Since all Blu-ray players are also DVD players, there is no need to buy two products to play DVD and Blu-ray discs. To the extent the complaint is that players for computer-based products are scarce, the situation is essentially the same. For example, Cyberlink's *PowerDVD 17 Pro* edition (that also supports Blu-ray playback) is available for \$39.95, and Corel's *WinDVD Pro 12* (again, also supporting Blu-ray playback) is available for \$54.99. Blu-ray drives (again, supporting DVD playback as well as Blu-ray Disc playback) are also readily available at reasonable price points. DVD CCA and AACS LA also note that BYU would have to have at least some players and drives, since a disc drive and player would be necessary in order to enable circumvention of CSS or AACS technology.

Because BYU's proposed exemption would involve making copies of full-length films in a librarying context, see Comments at 4 (noting circumvention would be required so that "a copy of the motion picture be stored on a media server or similar device"), the proposal would give effect not just to classroom instructions or distance education implicating the performance right permitted under sections 110 but also would implicate the reproduction and distribution rights to the work.¹⁴ This makes the request overbroad as to the claimed basis for noninfringement.¹⁵

¹⁰ https://www.bestbuy.com/site/tv-home-theater/blu-ray-dvd-players/abcat0102000.c?id= abcat0102000 (last visited Feb. 5, 2018).

¹¹ PowerDVD 17, Cyberlink, available at https://www.cyberlink.com/products/powerdvd-ultra/features_en_US.html (last visited Feb. 12, 2018).

¹² WinDVD Pro 12, Corel available at http://www.windvdpro.com/en/ (last visited Feb. 5, 2018).

¹³ Amazon offers numerous external and internal Blu-ray/DVD drives at prices below \$100.

¹⁴ The desire to library DVDs and BDs also informs the Register on that portion of the proposal that insists on removing the "short portion" limitation.

¹⁵ Apart from falling beyond the claimed basis for noninfringement, the case law cited by BYU is clearly distinguishable from their proposed use here. *Authors Guild, Inc. v. HathiTrust*, 755 F.3d 87, 98-99 (2nd Cir. 2014) (holding that copying the full text of more than ten million works to university servers was not "excessive or unreasonable" to support uses "permitted by the law of copyright"); *Authors Guild v. Google*, 804 F.3d 202, 229 (2nd Cir. 2015) (holding that digital copies of more than 20 million books made "so as to enable [libraries] to make noninfringing use" were "lawfully made" copies). BYU would be doing more than copying motion pictures, it would also be publicly performing and distributing them to students. Unlike *Google* and *HathiTrust*, the BYU's copying is not for the primary purpose of indexing and data analysis, but rather for the specific purpose of performing the works themselves. A more comparable example would be if Google and *HathiTrust* were copying works for the purposes of distributing them to the public, which is not what they were doing.

Fortunately, the Register need not resolve whether the request to make a library of copied films on media servers is somehow noninfringing, because, as explained above, there is no need for the exemption and the proposed class is impermissibly broad.

III. Joint Filmmakers, Joint Authors, and Joint Educators Fail to Provide Sufficient Evidence to Support Their Proposals

A. Joint Filmmakers Fail to Present Case to Expand the Exemption.

Joint Filmmakers fail again to develop a record of noninfringing uses to support their proposal to extend the exemption to all filmmaking, i.e., extend the exemption to nondocumentary films. In the last proceeding the Register did not dispute much of their legal arguments about the possibilities of a nondocumentary filmmaking being able to make noninfringing use of a clip. ¹⁶

The Register acknowledges proponents' view that some fictional filmmaking may offer criticism and commentary through "techniques such as parody, reference, and pastiche" or "present information and commentary meant to educate and analyze real events."

2015 Recommendation at 79 (footnote omitted). However, the Register went on to find that -

with narrative films there is a significant countervailing concern: that copyrighted works will be used in a manner that may supplant the existing, robust licensing market for motion picture clips.

Id. (footnote omitted). Accordingly, she rejected the proposal because the record did not support a finding that the "suggested nondocumentary uses are likely to be noninfringing." 2015 Recommendation at 82.

The Register should proceed with the analysis that the strictly narrative films are sufficient to find that the record does not support a finding that the uses of clips in nondocumentary films are likely noninfringing.

13

_

¹⁶ Register of Copyrights, Section 1201 Rulemaking: Sixth Triennial Proceeding to Determine Exemptions to the Prohibition on Circumvention, Recommendation of the Register of Copyrights (2015) ("2015 Recommendation").

1. The Proposed Uses in Narrative Films Submitted as Examples in This Proceeding Appear to be Infringing

For purposes of determining whether the alleged noninfringing uses are infringing, the following review of the strictly narrative work examples cited by the Joint Authors takes the same approach as the Register did in the last proceeding, concluding, as the Register did three years ago, that the uses are likely to be infringing and, hence, not the basis for an exemption in this proceeding.

(a) First Factor - the Purpose and Use Are Not Transformative

The purpose and use of copyright works for nondocumentary films are not transformative. In the last rulemaking the Register, recognized that a "number of the examples [did] not appear to be related to criticism or comment or otherwise transformative." 2015 Recommendation at 81. The Register's first example considered *Mandorla*, in which the hero through his imagination escaped from modern day realities to a "dark and magical place in a medieval French city." *Id.* His imagination involves using clips from *Excalibur* that make him want to recreate the scene as his own life. The Register found that "multiple excerpts from the film *Excalibur* are perhaps being used to flesh out the motivations of the main character and further the storyline, and it is not immediately apparent that these uses are transformative or should not be licensed." *Id.* The second example, *Farah Goes Bang*, involved a comedy about a woman who tries to lose her virginity while campaigning for presidential candidate John Kerry in 2004. The work made use of campaign clips. The Register found that "the campaign clips may be used for entertainment purposes, it is not clear that the uses are transformative." 2015 Recommendation at 81.

The overwhelming use of the works as described in the Joint Filmmakers' comments in this proceeding seem not to be for criticism or comment. The use of *Mr. Smith Goes to Washington* in the future narrative film about a professor, who leads a team of international scientists on a unique experiment is very similar to the use of Excalibur. In fact, the proposed work is by Roberto Miller, who made *Mandorla*. Miller says, "our characters will see (or recall in their minds) clips from films that illustrate a "divided world," and the fight against it, such as *Mr. Smith Goes to Washington*." Comments at 17. As noted above, Miller used a similar technique with the scenes from *Excalibur* to demonstrate the imagination of the film's protagonist, which "flesh[ed] out the motivations of the main character and further[ed] the storyline." 2015 Recommendation at 17. In this case, Miller's use apparently would at the very least be illustrative of the characters' thoughts, which is akin to showing the motivation of the characters. Therefore, under the analysis from the prior proceeding, the use cannot readily be found to be noninfringing.

While *nirvana the band the show* plans to parody the *X-Files*, this use also cannot reasonably be expected to be noninfringing. Matt Johnson, the actor and director of the show explains why the program is relegated to the Internet for the U.S. market. "You could never put our show on TV. I mean, it's a show based on copyright infringement." 17

Reviewing Miller's discussion of an episode that made use of *Mrs. Doubtfire*, the program is undoubtedly infringing.

Structurally the show often takes on the shape and form of the thing it is parodying. For example in a recent episode Matt, one of the two main characters, is watching the 1993 classic Mrs. Doubtfire. When he realizes the absurdity of the film's premise (Robin Williams in disguise to hang out with his kids who he's not allowed to be around), it births Matt's idea for a plan of action (Matt dresses in a disguise to hang out with his best friend Jay who has told Matt he didn't want to spend time with him that night). As the episode progresses plot points from Mrs. Doubtfire help to influence the storyline of our own show, culminating in a climactic scene at a restaurant where Matt is switching between his true identity and his disguise (just as Robin Williams does in *Mrs. Doubtfire*), before he runs out of rope and the truth comes out.

Letter from Matthew Miller (December 4, 2017) found at Appendix G. The purported parody is actually a satire as it pokes fun not so much at *Mrs. Doubtfire* but the absurdity of the characters and their relationship. *See, e.g., Dr. Seuss Enterprises, L.P. v. Penguin Books USA, Inc.*, 109 F.3d 1394, 1400 (9th Cir. 1997) (explaining a parody would poke fun at or ridicule the targeted copyrighted work, while in a satire the "copyrighted work is merely a vehicle to poke fun at another target."). Furthermore, the "plot points" that influence the storyline actually move the storyline without transforming the copyrighted work. In fact, the description alone suggests that the episodes "slavishly copies," which is usually fatal to a satire.¹⁸

The remaining examples can be treated collectively. They are:

• The Houses October Built making use of Scooby-Doo; 19

¹⁷ Sam Sutherland, *Televison Nirvana the Band the Front Five* (June 22, 2008), Exclaim! available at http://exclaim.ca/music/article/television-nirvana_band_front_five (last visited Feb. 12, 2018).

¹⁸ In *Campbell v. Acuff-Rose Music*, 510 U.S. 569, 581 (U.S. 1994), the Court explained, "Parody needs to mimic an original to make its point, and so has some claim to use the creation of its victim's (or collective victims') imagination, whereas satire can stand on its own two feet and so requires justification for the very act of borrowing."

¹⁹ Letter from Zack Andrews found at Appendix J.

- Science fiction films including footage of Hitler, ²⁰ space, environmental degradation, overcrowding and pollution; ²¹ and
- Narrative films including a man looking for his father after 9/11²² or a singer from Mexico, ²³ making use of nonspecific archive news footage and news footage including footage of 9/11.

None of the proposed uses is for criticism or comment or is otherwise transformative. Andrews suggests that using a scene from *Scooby-Doo* in the background would have been "thematically speaking and as [a] clue to the film." Miller states that he would "essentially use [the footage of Hitler] as a prop within the briefing scene." Carman says, "fair use imagery" would (i) "compliment the isolation the inmates feel in their jail cell," (ii) "let the audience know the state of what the future has become," and (iii) "would be instrumental in portraying this age." He concludes that "this possibility [of use] would enable the film to portray its message in its true scope." Pedagana argues 9/11 footage will "truthfully illustrate the aftermath of 9/11," and "news clips are necessary to illustrate and support the magnitude of the main character's experience and contextualize his fictional experience." While Goodman baldly asserts that use of news footage would be "very transformative," she also claims that her films "rely heavily on an accurate historical background."

In sum, these uses essentially involve using the work as a prop—they would provide theme; a clue to the film; let the audience know; illustrate; provide scope and assist in portraying the age; illustrate the aftermath of an event; and provide historical context. The Register previously concluded that the scenes from *Excalibur* used "to flesh out the motivations of the main character and further the storyline" were not transformative. 2015 Recommendation at 81. Similarly, these uses which would provide context and authenticity such as a prop are insufficient to conclude that the use is transformative.

²⁰ Letter from Matthew Miller (Dec. 4, 2017) found at Appendix G.

²¹ Letter from James Carman (undated) found at Appendix D.

 $^{^{\}rm 22}$ Letter from Tim Pedegana (undated) found at Appendix I.

²³ Letter from Brenda Goodman (undated) found at Appendix R.

²⁴ See supra note 19.

²⁵ See supra note 20.

²⁶ See supra note 21.

²⁷ *Id*.

²⁸ See supra note 22.

²⁹ See supra note 23.

These uses are also not transformative because they are for entertainment purposes. The Register previously recognized the use of clips from John Kerry's campaign in the comedy, *Farah Goes Bang*, was for entertainment purposes and, hence, not "fair use." 2015 Recommendation at 81. An evaluation is difficult because none of the uses have actually been made and or released except for *The Houses October Built*. Nevertheless, reviews of that movie compiled on the IMDB website recognize it as a horror/thriller movie. The review from the LA Times credits the documentary style but does not suggest the movie does anything more than scare the audience. Thus, if a comedy is entertaining, then a horror/thriller movie is entertaining as well. Consequently, *The Houses October Built* and the other works seem likely to be found to be for entertaining purposes, and therefore are not likely to be transformative.

(b) Fourth Factor—Harm of the Licensing Market for the Works

Clip licensing remains a growing segment of creators' derivative market for their copyrighted works. The Register recognized that the effect of the use on the licensing market for creative works "weighs relatively substantially against fair use." 2015 Recommendation at 81-82.

(i) Evidence of the Clip License Market - Studios Engage in Clip License Market

In 2015, Simon Swart testified on behalf 20th Century Fox Entertainment that the exemption would have a pretty substantial impact on its clip licensing business unit. He explained, "We actually do a pretty vibrant licensing business We have a team of three people that actually looks and considers 2000 applications a year on average." Tr. 79:8-12 (May 20, 2015). DVD CCA and AACS LA understand that other major studios have similar experiences and business practices.

³⁰ See External Reviews, *The Houses October Built (2014)*, IMDB available at http://www.imdb.com/title/tt1958043/externalreviews?ref_=tt_ql_op_5 (last visited Feb. 12, 2018).

³¹ See Tsai, Martin, The Houses October Built Produces Credible Horrors, LA Times, available at http://www.latimes.com/entertainment/movies/la-et-mn-houses-october-built-review-20141010-story.html (last visited Jan. 24, 2018). ("documentary style makes the proceedings all the more frightening when interiors of haunted houses begin to resemble those booby-trapped dungeons from the Saw").

³² In the absence of the works actually being made, the Register must conclude that the science fiction films and narrative dramas are for entertainment purposes.

(ii) Evidence of the Clip License Market - Public Television, a New Entrant to the Clip License Market

The market for clip licensing has even attracted new entrants including public television stations. A 2015 article in *Current*, the publication for public radio and TV stations, ³³ states, "Thousands of hours of archival footage are emerging from dusty storage rooms at public television stations to find a second life in advertisements, marketing campaigns, documentaries and other media projects produced as far away as China."³⁴

This clip licensing market offers public TV stations a new revenue stream. The article notes:

Stations such as KVIE in Sacramento, Calif., are already earning a small but steady amount from footage. Producer Jim Finnerty, who handles the sales, refers to it as "an annuity." Clips of grazing livestock, colorful produce and farming machinery in use earn KVIE from \$1,000 to \$2,500 a month.

Finnerty added that the station is planning to "increase [licensing revenue] in the future as [it] provide[s] more material." *Id*.

As far as price points for these licenses, some stations offer a sliding scale. *Id.* Big players are charged more. "If . . . CNN or the NFL wants footage for worldwide rights in perpetuity, prices range from \$40 to \$75 per second." However, as explained by Esh Halpern, the intellectual property attorney for Chicago public TV station WTTW, "If a small documentary producer or educational group needs a clip, we often waive the fee." According to Halpern, waiving the fee was consistent with the station's commitment to "serve the community." *Id.* Implicitly, everyone else, including nondocumentary filmmakers, would have to pay some amount of money for the use.

Current is the nonprofit news service for and about public media in the U.S. Current publishes online daily and in print -16 issues in 2016.

We're read by people involved in public media — radio and TV station and network employees, independent producers, local volunteers and board members, state and national policymakers and others.

About Current available at http://current.org/about-this-site/.

³³ The about page states:

³⁴ See Public TV Stations Are Discovering Revenue Potential in Stock Footage, Current (June 4, 2015) available at https://current.org/2015/06/public-tv-stations-are-discovering-revenue-potential-in-stock-footage/ (last visited Jan. 24, 2018).

Another such service is offered by CNN, which offers footage for licensing, including recent events (updated daily) and 35 years of archival material.³⁵

(iii) Filmmakers Recognize the Value of Clip License Market

The evidence suggests that nondocumentary filmmakers also expect to license these copyrighted works. Ward explains, "Securing licenses to all the branded content, logos, music, or other copyrighted material is a big part of delivering an acceptable product to a distributor." For example, Jon Katzman for his bio-pic, *The Man in the Mirror: The Michael Jackson Story?*, licensed the infamous scene of Jackson showing his baby from a hotel window. However, filmmakers, including nondocumentary filmmakers, choose not to license - because the use of the copyrighted works is not worth the price of the license. Ward explains, "licensing [the four second clip from *Back to the Future*] was not an option because it would have been too expensive." Similarly, Andrews did not license the scene from *Scooby-Doo*. 40

The fact that filmmakers choose to forego making use of works because they would have to license the work is part of the creative process in filmmaking. Andrews explains the cost of the license was not worth the benefit the use of the work would contribute to the film. "With our budget, that was not smart for something so trivial." The decision not to license does not prevent these filmmakers from creating their works. Both Ward and Andrews finished their works without making use of these works. Instead of licensing, they find alternative solutions. Ward for example said instead of licensing the four second scene, they "ended up creating an audio sound-alike instead." While Ward and Andrews chose not to license any footage, others could choose to do so if they regard the value of the clip to be worth the cost of the license, within the constraints of their budget.

 $^{^{35} \ \}underline{http://collection.cnn.com/content/home.do}$

³⁶ Letter from Rachel Ward (Dec. 14, 2017) found at Appendix N.

³⁷ Letter from John Katzman (undated) found at Appendix E.

³⁸ Goodman attempts to suggest even though the use would be permitted under the fair use doctrine, she consider licensing—in part—because there is no exemption against circumvention. Goodman seeks to make use of news clips. However, news clips are not regularly distributed on protected DVDs or BDs and so this example does not support an exemption relative to CSS and AACS.

³⁹ See supra note 36.

⁴⁰ See supra note 19.

⁴¹ *Id*.

⁴² See supra note 36.

(iv) No Evidence of the Effects on the Clip License Market

The Joint Filmmakers do not present any evidence as to the effect on the licensing market. Instead, they argue that because the Register has found that the use of the work does not interfere with the primary or derivative market for the use of the work by documentary filmmaking, such a finding should equally apply to nondocumentary filmmaking. Comments at 15. Joint filmmakers add, "Given that there is no right to a license to work made pursuant to fair use, there can be no market-based objection to an exemption that merely permits that fair use to go forward." *Id.* The argument presumes that the use in question is indeed fair, which the Register weighing the evidence in the last proceeding, concluded that there was an adverse effect on the licensing market when use was made by nondocumentary filmmakers, weighing against a finding of "fair use." 2015 Recommendation at 82. The Joint Filmmakers have not provided any new evidence for the Register to conclude otherwise. Consequently, the Register should again find that the fourth factor continues to weigh "relatively substantially against fair use." *Id.*

B. Joint Authors Fail to Present a Case to Expand the Exemption

Joint Authors propose to modify the current exemption for multimedia e-books to include fictional e-books and works not offering film analysis ("other nonfiction"). In the last proceeding the Register rejected the same proposal because there was no evidence in the record of such use. *See* 2015 Recommendation at 77. The Register must again reject the proposal because the Joint Authors have not demonstrated that the fictional uses or other nonfiction uses are noninfringing. Furthermore, even assuming that the uses are noninfringing, the Joint Authors cannot show that there is any adverse effect on an actual use based on the existence of the TPMs.

1. Review of the Evidence Presented in the Initial Comments

(a) Fictional Multimedia E-Books

Joint Authors provide no evidence of <u>actual use</u> of a motion picture clip in a fictional e-book or in an "other nonfiction" e-book. The Joint Authors do suggest that fanfiction writers could make use of works in multimedia e-books. For example

• An author, whose pseudonym is Holdt, would want to "transform the story of an existing canon by taking characters from the original canon and putting them in a different movie universe," and

• An anonymous author would like to use Ren'Py⁴³ to discuss the pregnancy of a character in a television series.⁴⁴

(b) Non-Fiction Multimedia E-Books Not Related to Film Analysis

Similarly, Joint Authors do not provide any evidence of <u>actual use</u> of a motion picture clip in an "other nonfiction" e-book. The Joint Authors suggest that such possible use could be made by "literature professors [who] could include clips to study or critique adaptations of characters, plots, and narratives from a variety of novels and plays"; "historians [who] could add video clips to their texts to provide historical context or to demonstrate a historical phenomenon, technique, or artifact"; and "[a]uthors working outside of film who wish to offer character analysis, historical context, or examples of subject matter" Comments at 11. As far as specific examples, the Joint Authors provide the following examples:

- Kerby Ferguson could include his video essays, *This is not a Conspiracy Theory*, in a multimedia e-book format.⁴⁵
- An alleged anonymous author wants to write a nonfiction multimedia e-book about the psychology used in certain TV shows illustrated with videos as examples. 46
- Heidy Tandy wants to make use of clips from the television show *Supernatural* to create a multimedia e-book for the purpose of teaching fair use. 47

2. Without Examples of Actual Use Evaluating the Alleged Noninfringing Use Is Impossible

In the absence of actual use, evaluating the use is all but impossible. This rulemaking has previously indulged the proponents' claims of prospective uses.⁴⁸ The Register has to look no further than the last rulemaking:

Academy Award-winning sound editor Mark Berger was to make *Listening to Movies*.
 No such e-book can be identified.

⁴³ Wikipedia explains that Ren'Py is "a free software engine which facilitates the creation of visual novels, a form of computer-mediated storytelling."

⁴⁴ Comments at 18.

⁴⁵ Comments at 17-18.

⁴⁶ Comments at 20.

⁴⁷ Comments at 20-22.

⁴⁸ See, e.g., 2015 Recommendation at 77 (describing the case as leaner than other cases).

⁴⁹ 2015 Recommendation at 86.

- Jillann Spitzmiller had apparently made e-books using her own clips.⁵⁰ However, a search of Google Play, Kindle, iTunes and even her own website (www.howtomakeadocumentary.com) does not reveal a single e-book authored by Spitzmiller.
- Pamela Samuelson wanted to make an e-book using clips of from *James Bond* movies to teach a copyright course.⁵¹ A search for such a book has proven fruitless.
- Bobette Buster, who was developing a four-part e-book called *Deconstructing Masters of Cinema*, ⁵² again cannot be found.

In light of the fact that past representations of proffered or contemplated uses have never materialized, there is no reason for the Register to further indulge the Joint Authors particularly when they seek to expand the exemption.

The proposal to expand the exemption is analogous to filmmaking and noncommercial video. An exemption for filmmaking has existed for documentary filmmaking, and efforts to expand the exemption to nondocumentary filmmaking, particularly to narrative or fictional films have failed because the record did not support a finding that these uses were noninfringing. Notably that record included actual use. Here the Joint Authors have not proffered any actual use at all.

Joint Authors surprisingly suggest that the exemption should be expanded to facilitate fanfiction. Yet, they have not proffered a single example of that use. In 2010, creators of noncommercial videos, which also involve a good amount of fanfiction participants, produced several examples of the use and they argued how the use of copyrighted works such as *Supernatural* in *Wormen's Work*, a noncommercial video, was criticizing the role of female characters in the show. Here, the proposal suggests that the fanfiction author Holdt would seek to introduce a character into a different universe. Holdt could intend on introducing *Thor*, a property of *Marvel*, into the *D.C. Comics* universe. Or he could have *Harry Potter* traveling in *Star Wars' Millennium Falcon*. Only Holdt knows what he means, but even he does not know what it will look like until the use is actually made. S4

⁵⁰ *Id.* at 40 n.225 identifying the proffered "actual or prospective uses."

⁵¹ *Id*.

⁵² *Id*.

From Prohibition on Circumvention of Copyrights in RM 2008-8, Rulemaking on Exemptions from Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies at 50 (2010) ("2010 Recommendation"). While Heidy Tandy, who wants to include scenes of *Supernatural* in a multimedia e-book, may be the same creator of *Wormen's Work*, Tandy suggests that she wants to make use of the work to teach fair use. *See supra* note 47.

⁵⁴ The Joint Authors purport to understand the use but even their explanation is equally

More importantly, the Register has no basis to conclude whether his intention to make a noninfringing use has actually succeeded until she sees it. Consequently, concluding that the prospective uses would be noninfringing when proponents failed to produce any evidence would be an indefensible double standard.

3. TPMs Are Not Causing Any Harm to Multimedia E-Book Format

The proponents cannot demonstrate any harm, and most importantly they cannot show that technological protection measures are causing the alleged harm to the noninfringing use. The noninfringing use in the marketplace is de minimis. While there has been slow growth in the e-book market, the level of growth does not in any way represent sales of multimedia e-books, also discussed here as enhanced e-books.⁵⁵ Essentially, there is no market for such books.

(a) There Is No Market for Multimedia E-Books

The discussion thread to the authorearnings.com's article from February 2017, Big, Bad, Wide & International Report: Covering Amazon, Apple, B&N, and Kobo E-book Sales in the US, UK, Canada, Australia, and New Zealand, 56 addresses the reality that no market has developed for enhanced e-books. Patrick from Videobooks Interactive Ltd., which offers an enhanced ebook product Videobooks, notes that "Apple took an initiative with iBooks Author, but the format never seemed to take off." He asks, "Does anyone have numbers on enhanced e-books? Or any idea if there is an initiative to move more into this direction by a big player? Data Guy from authorearings.com states, "there's a lot more media articles about 'enhanced' eBooks than actual sales of those e-books " He adds, "The fact that "enhanced e-books" haven't yet made significant sales inroads might be telling us that actual consumer demand for this type of change to the text reading experience is a very niche one."

speculative. See Comments at 18.

The Canadian publishing respondents who believe that enhanced e-books offer no market impact, has increased from 40% to 73%, with those believing a light impact has decreased from 33% to 20% and those who believe that they hold a positive impact has dropped from 7% to ZERO%.

Martyn Daniels, *Are Enhanced eBooks a Digital Grail*, Brave New World (May 14, 2015) available at http://bookseller-association.blogspot.com/2015/05/are-enhanced-e-books-digitalgrail.html ("ZERO" appearing in the original text). Brave New World is a blog dedicated to following the digitization on publishing and its content. There is no reason to believe that U.S. publishers do not also share the same sentiment.

⁵⁵ For example, as reported in May 14, 2015, in Brave New World, Canadian publishers have given up on enhanced e-books.

⁵⁶ The article can be found at http://authorearnings.com/report/february-2017/ (last visited Feb. 12, 2018).

In the debate over the failure of enhanced book, a December 20, 2017 article published in *Wired, The Kindle Changed The Book Business. Can It Change Books?*, ⁵⁷ which largely blamed Amazon's domination of the e-book market, ⁵⁸ noted:

The challenge for all these new formats, though, is that there's no larger system that helps people make, sell, and consume them. "One of the things that holds you back from developing a highly interactive, graphic, endless storytelling interface is that we don't have the infrastructure for that," says Sean McDonald, the executive editor at publishing house Farrar, Straus, and Giroux and the head of its experimental FSG Originals imprint. "It takes a different amount of effort than words on a page, and different skillsets."

Id.

The Digital Reader's December 21, 2017 response, Why the Kindle Hasn't Changed Books, and Other Slightly Ridiculous Questions,⁵⁹ noted that Amazon has invented "new-ish forms of books" that support video and audio. It argues

"Amazon won the e-book market by giving consumers exactly the same stories they were already reading, only in a new package And that is why it succeeded where previous attempts faltered. Amazon gave consumers the content they already wanted, only on a new medium that let readers carry hundreds of books at a time.

Id.

(b) Technological Limitations (Not TPMs) Are Holding Back the Multimedia E-Book Market

⁵⁷ David Pierce, *The Kindle Changed the Book Business. Can It Change Books?*, Wired (Dec. 20, 2017) available at https://www.wired.com/story/can-amazon-change-books/ (last visited Feb. 12, 2018).

⁵⁸ Pierce notes that Amazon makes eighty percent of all e-book sales in the United States. *Id.*

⁵⁹ Why The Kindle Hasn't Changed Books, and Other Slightly Ridiculous Questions, the Digital Reader (Dec. 21, 2017) available at https://the-digital-reader.com/2017/12/21/kindle-hasnt-changed-books-slightly-ridiculous-questions (last visited Feb. 12, 2018).

The last rulemaking briefly examined the technological limitations of the proposed noninfringing use. Buster, one of the Joint Authors, admitted that the clips in her thenforthcoming e-book would not even be offered in standard definition. "You're actually getting a lot more in my overview than I would be able to do in the clips that you see in my book. I would be writing that and describing that in my book." Buster's overview did not include HD. She related that an unidentifiable "Digital Collective" in Berkeley could not support one of her projects because the amount of embedded clips would create download issues for the user. According to Buster, they told her, "We really suggest you go to iBook Author for this project." For the project is a support of the user.

iBook Author is limited to 2 Gigs. According to its own documentation,⁶⁴ iBook Author supports:

- H.264 video: Up to 720p, 60 frames per second, High Profile level 4.2 with AAC-LC audio up to 160 kbps, 48 kHz, stereo audio. Video shared to file from iMovie 10 using the HD 720p option will use these settings.
- MPEG-4 video: Up to 2.5 Mbps, 640 x 480 pixels, 30 frames per second, Simple Profile with AAC-LC audio up to 160 kbps per channel, 48 kHz, stereo audio.

⁶⁰ Tr. at 23:7-10 (May 28, 2015).

⁶¹ Tr. at 15:7-17; 17:6-10 (May 28, 2015).

⁶² Berkeley City College, which offers a Multimedia Arts Program, has "Digital Artists Collective." Its only "platform" offered to the public is its own website, which does not currently offer any video related exhibits. See DAC Digital Artists Collective available at https://digitalartistscollective.net/.

⁶³ Tr. at 22:19-20 (May 28, 2015).

⁶⁴ Add Video or Audio to Your Books in iBooks Author (Published date Jan. 17, 2017), Apple available at https://support.apple.com/en-us/HT202374 (last visited Feb. 12, 2018).

At the highest quality, H.264 video would be no more than 2.3 minutes of clips, which would consume approximately 1.99 GB.⁶⁵ MPEG-4 at 2.5 Mbps (DVD quality) would be about 60 minutes of video.⁶⁶ On a Wi-Fi network (100 Mbits/s), a 2 GB file would take approximately 2:51 (minutes:seconds) to download while on a 4G network (80 Mbits/s) would be 3:34 (minutes:seconds) to download.⁶⁷

The baseline iPad, Apple iPad (9.7-inch, 2017), which CNET recommended for everyone, ⁶⁸ offers 32 GB of storage. According to Ars Technica, ⁶⁹ *Hugo*, a 2 hour and 6-minute film, downloaded from iTunes, would consume in the following formats:

SD	1.74 GB
720p	3.99 GB
1080p	4.84 GB

Consumers with a few movies can fill up a 34 GB iPad quickly. It leaves little room for a multimedia e-book offering SD clips and even less room for a book offering HD clips. As noted above the technological limitations shape the market reality for enhanced e-books. Consumers could choose to have fewer movies and a few enhanced e-books, or they could choose a few movies and hundreds of ordinary e-books. They obviously have chosen the latter.

⁶⁵ Video Space Calculator, Digital Rebellion available at https://www.digitalrebellion.com/webapps/videocalc (last visited Feb. 12, 2018). On its About Us page, Digital Rebellion states that, "Since 2007, Digital Rebellion has created unique and powerful maintenance and workflow tools for post production that are used every day by freelancers, major studios and Fortune 500 companies alike."

⁶⁶ DVD-5 (single layer) has capacity of 4.7GB which is 133 minutes. 2GB would be about 60 mins. https://support.duplication.cdbaby.com/hc/en-us/articles/206172377-DVD-capacity-limits-for-all-types-of-DVDs

⁶⁷ Download Time, Calculate the Required Time for Download of Data available at http://www.download-time.com/ (last visited Feb. 12, 2018).

⁶⁸ Scott Stein, *iPad vs. iPad Pro vs. iPad Mini 4: Which Is Right for You?*, (Nov. 22, 2017), CNET available at https://www.cnet.com/how-to/which-ipad-should-you-buy-2017-2018-edition/ (noting "a near-universal recommendation for almost anyone who wants a tablet") (last visited Feb. 12, 2018).

⁶⁹ Van Beijnum, Iljitsch, iTunes 1080p Video Looks Better, Saves Space Using Better H.264 Compression available at https://arstechnica.com/gadgets/2012/03/new-itunes-1080p-looks-good-through-better-h264-compression.

(c) Technological Protections Measures Have Not Been Harming the Allegedly Noninfringing Use

The marketplace problems for multimedia e-books have nothing to do with any TPMs. The House Commerce Committee that designed this rulemaking stated that the "purpose of the rulemaking was to assess whether . . . technological protections, with respect to particular categories of copyrighted materials is diminishing the ability to use the works in ways that are otherwise lawful." House Commerce Committee Report at 37. Even assuming that every use of motion pictures in any e-book is lawful, which it is not, the problems in the marketplace stem from limitations in the authorship software, file size of video clips, download rates, storage capacity and even consumer reference." Not one authority other than proponents suggests that enhanced e-books have failed due to TPMs (i.e., they cannot obtain lawful access to motion pictures due to TPMs).

(i) The Alleged Harm is Not Distinct, Verifiable and Measurable

Even if as proponents argue that TPMs are causing harm to the ability to use motion pictures in multimedia e-books, there is insufficient evidence of such harm. The Commerce Committee stated that the harm had to be "distinct, verifiable" and measurable. *Id.* Here in this proceeding the proponents have not proffered any examples of actual use. They instead suggest possibilities of prospective uses. In the last proceeding, they had similarly proffered prospective uses. Yet, none of the touted promised books were made.

The lack of these promised books from the last proceeding further evidences that the harm does not rise from TPMs. Each of the promised Berger, Spitzmiller, Samuelson and Buster books would have had the benefit of the exemption. Thus, the prohibition against the circumvention of TPMs in no way prevented these would-be noninfringing uses (i.e., would not have prevented these books from being published). In fact, DVD CCA and AACS LA presume the search for these titles was adequate because introducing them in this proceeding would present strong testimony to the usefulness of the exemption. The proponents, however, have not proffered these titles as examples or even cited them as being made and released.

_

⁷⁰ For example, Buster discussed an e-book that included students enacting scenes from *Blade Runner* to describe how cinematography works, "I just found it a totally inadequate experience, to read the book, watch the clips, because you would much rather just go see Blade Runner and then read a commentary about it." Tr. 25:4-13 (May 28, 2015).

DVD CCA and AACS LA further recognize the earnestness of at least Buster to release her work. She claimed to have the team in place, reduced the number of clips, spent 9 -10 months of her time and supported the project with her own money. According to Buster, the only doubt she had was whether Apple would accept her clips⁷¹ and whether Apple would prevent her from offering her book on other platforms. Those fears seem to be unfounded.

Buster several times suggested that the work was subject to Apple approval. However, iBooks is a self-publishing platform, and unlike a traditional publisher, Apple does not apparently limit any submissions based on an editorial or quality perspective. A February 10, 2017, article from the Mac Observer suggests that any self-publishing author who wants to "leverage multiple platforms" not to forget about iBooks. In its description of the process, the article makes no mention of a review by Apple. As far as limitations by Apple, Apple may prevent a self-publishing author from selling on other platforms a work created with the iBook Author tool. However, creators remain free to distribute their works on other platforms so long as the work is not packaged in the iBook Author format.

Admittedly, DVD CCA and AACS LA do not know why Buster has still not released her promised work. She certainly faced the dilemma that any other multimedia e-book creator would face. Technological capacity limits the use of HD clips to 2.3 minutes (at least on the iBook Author platform). This limited use likely frustrates any creator who is unwilling to compromise their vision of making use of HD clips. But even if the work can be accomplished with 2.3 minutes of HD clips, creators must then convince themselves that consumers will value the work sufficiently enough to store it on their devices with limited capacity. Most importantly, consumers have to place as much value on the multimedia e-book as they would on a one-hour program since the multimedia e-book is going to consume roughly the same capacity on their device. These limitations and market conditions make the development of multimedia e-books highly unlikely.

-

⁷¹ See e.g., Tr. 10:18-11:5,12:4-9, 13:2-8 (May 28, 2015).

⁷² Andrew Orr, Self Publish Your Books With iBooks, the Mac Observer (Feb. 10, 2017), available at https://www.macobserver.com/tips/how-to/self-publish-books-ibooks/ (last visited Feb. 12, 2018).

⁷³ See, e.g., iBooks Author: You Can Sell Your "Work" Elsewhere, Just Not In The Format Created By iBooks Author [Opinion], Cult of Mac (Jan 20, 2012) available at https://www.cultofmac.com/141566/ibooks-author-you-can-sell-your-work-elsewhere-just-not-in-the-format-created-by-ibooks-author-opinion/.

(ii) The Alleged Harm is De Minimis

But even if a few multimedia e-books offering fiction and other nonfiction would exist because of the creators' commitment to the medium, this actual use is insufficient to conclude that TPMs are creating an adverse impact. The House Commerce Committee stated that an exemption should not be "based upon *de minimis* impacts." House Commerce Committee Report at 37. The Register resolved a case of "*de minimis* impact" early on in the history of this proceeding with a petition to circumvent DVDs for the purpose of enabling Linux-based players.⁷⁴

While it is unfortunate that persons wishing to play CSS-protected DVDs on computers with the Linux operating system have few options, the fact remains that they have the same options that other consumers have. The Register concludes, as she concluded three years ago, that the harm to such persons is de minimis, amounting to no more than a mere inconvenience.⁷⁵

At that time there was already a market for Linux, ⁷⁶ yet the Register still found the inability of Linux users to lawfully playback DVDs on Linux players was "*de minimis*." Consequently, even if a few creators would still choose to go forward with the multimedia e-book format to create fiction or "other nonfiction," then their inability to use clips from motion pictures distributed on DVDs and BDs certainly must amount to nothing more than a mere inconvenience.

mid-1990s: Linux runs on cluster computers at NASA and elsewhere late 1990s: Dell, IBM and Hewlett-Packard offer commercial support for Linux on their hardware; Red Hat and VA Linux have initial public offerings 1999: EmperorLinux started shipping specially configured laptops running modified Linux distributions to ensure usability 2001 (second quarter): Linux server unit shipments recorded a 15% annual growth rate.

Timeline, Linux Adoption, Wikipedia available at https://en.wikipedia.org/wiki/Linux_adoption (last visited Feb. 12, 2018).

⁷⁴ Recommendation of the Register of Copyrights in RM 2002-4, Rulemaking on Exemptions from Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies (Oct. 27, 2003) ("2003 Recommendation").

⁷⁵ *Id.* at 145.

⁷⁶ Wikipedia provides a timeline noting the following relevant dates:

(d) Expanded Exemption Would Harm the Licensing Market

Expanding the exemption to fictional works and "other nonfiction" would harm the creation of a market to license clips of motion pictures to multimedia e-book creators. Creators of multimedia e-book seem to readily overlap with filmmakers. For example, in this proceeding Ferguson could include his video essays *This is not a Conspiracy Theory* in a multimedia e-book format, ⁷⁷ For Ferguson and other filmmakers, if the multimedia e-book market were to ever materialize, then this market would be another opportunity to exploit their work. *See* Joint Authors Comments at 17 ("Lately I've begun to explore other media formats in which to share my ideas."). Similarly, if the multimedia e-book market were to ever materialize, other creators such as the studios or even public television would also seek to exploit this market as an opportunity to license their works. Consequently, the practices for a filmmaker who makes use of a work for her film should be congruent with the practice of use of the work in a multimedia e-book.

Multimedia e-books creators should be subject—at least—to the practices of filmmakers. If nondocumentary filmmakers such as those who create narrative or fictional works are expected to license the work, the same filmmakers should also be expected to license the work when they seek to exploit their work in the multimedia e-book format. The expectation to license the work should apply equally to all multimedia e-book creators regardless whether a film of the e-book exists. Any other result would be incongruent.

4. Any Exemption Should Include a DRM Requirement

If the Register decides to expand the exemption, beneficiaries of the exemption should require the use of TPMs. iBook Author for example allows self-publishing authors to choose whether their work will include DRM.⁷⁸ They should be required to do so.

If you have a Paid Books Account and choose to use DRM protection in your book, video and audio in Media widgets and Keynote widgets will be DRM-protected when your book is available in the iBooks Store.

⁷⁷ In the last proceeding, Spitzmiller, a recognized filmmaker, wanted to create a multimedia ebook, and Buster testified that she had been producing a documentary for some three years. Tr. at 18:14-18.

⁷⁸ See supra note 64. Apple states the following:

C. Joint Educators' Proposal to Remove MOOC-Related Restrictions Is Not Supported by the Law or Evidence

The Joint Educators propose to eliminate the restrictions applied in the current exemption applicable to MOOCs. They make essentially the same arguments that were made in the prior proceedings. Reiteration of the points has no more validity than it did three years ago. Further, Congress has not changed the law regarding distance learning, which the Register found to contain requirements for the kind of uses that MOOCs have for this kind of content. DVD CCA and AACS LA, accordingly, oppose the expansion that the Joint Educators propose.

1. Joint Educators Fail to Present Any Use of a Work in a MOOC Offered by Any Other Type of MOOC Other Those MOOCs Offered by Accredited Nonprofit Educational Institutions

The proponents of the proposed modification and expansion to the MOOC exemption are three individual professors and two academic societies. They argue that expansion of the exemption would serve important needs through educational offerings from a variety of parties not qualified to take advantage of the existing exemption. They have made several specific requests for modifications, including removing the limit on the nature of the institution offering the course, removing the "MOOC" moniker (presumably, to enable the exemption to be utilized by non-massive courses), clarifying the application to "blended online courses," and removing the TEACH ACT-based technical requirements for any MOOC utilizing the exemption.

The picture painted by the proponents is of a vibrant market for online education from a variety of sources that they hypothesize would benefit from being able to circumvent TPMs in order to use clips of motion pictures in the same manner as now permitted in accredited non-profit educational institutions. But the key points about their presentation are that what they have demonstrated is that the online education offerings are thriving today and what they have not demonstrated is that any of those involved with the online education offerings is actually suffering harm due to the lack of this exemption.

DVD CCA and AACS LA would first observe that none of the institutions named by the proponents as supposedly harmed are actually present in this proceeding. No for-profit accredited educational institution – University of Phoenix, Full Sale University, Strayer College, or any other such institution – has come forward to provide evidence that any of its activities is harmed by the circumvention prohibition. Similarly, neither of the two major unaccredited education systems, the Khan Academy and Lynda (by Linkedin/Microsoft), have put forward any support for the proposal that is before the Copyright Office. Nor has any state bar association or other professional organization offering online courses suggested that they would like to circumvent DVDs or Blu-ray discs protected with CSS or AACS, respectively, in any of their online educational offerings. The filing does say that the current exemption would not allow Professor Decherney to offer his MOOC on Hollywood to a film society, but even this example does not identify a particular film society that would actually offer this course if the exemption were modified.

The Joint Educators have not demonstrated any need for an exemption in order to enable the use of a work in a MOOC offered by any other type than what is currently approved – MOOCs offered by "accredited nonprofit educational institutions." They point to examples of uses made by:

- Professor Abulor of Princeton University, who will create a MOOC incorporating clips of Game of Thrones and House of Cards to illustrate political thought; and
- Professor Decherney of the University of Pennsylvania, who has created a MOOC regarding Hollywood.

Both uses would be in MOOCs offered by professors at accredited nonprofit educational institutions.⁷⁹ Indeed, Joint Educators concede they have not proffered any examples of use of a motion picture by any other type of MOOC than those offered by accredited nonprofit educational institutions as they rely on Peter Decherney's example when arguing that the use is noninfringing. Comments at 10.

They argue that they are not trying to change the use but expand the user whose identical, educational uses would *likely* qualify as fair use. *Id.* The Joint Authors however provide no authority for that very proposition.⁸⁰

_

⁷⁹ The Joint Authors also discussed Professor Knill of Harvard University, who maintains a webpage that has clips of motion pictures demonstrating math. While Knill is not offering his clips in a MOOC, he too is at an accredited nonprofit educational institution.

⁸⁰ Joint Authors provide no argument at all to addressing the fact that for-profit educational institutions are undoubtedly commercial enterprises that Copyright law does in fact treat differently from non-profit educational institutions. In particular, uses made by commercial enterprises are evaluated differently in determining whether a use is fair when the activity is for alleged educational purposes. *See, e.g., American Geophysical Union et al. v. Texaco, Inc.*, 802 F. Supp. 1 (S.D.N.Y. 1992); *Basic Books, Inc. v. Kinko's Copies,* 758 F. Supp. 1522 (S.D.N.Y. 1991); *Princeton University Press v. Michigan Document Services.* 99 F.3d 1381 (6th Cir. 1996). Joint Authors do nothing to address how the alleged noninfringing use by for-profit institutions reconciles with this line of cases. Instead, they avoid the question in favor of an undisputed proposition that the fair use doctrine is available to commercial enterprises. Comments a 11.

In the context where there are no participants other than those from accredited, nonprofit educational institutions, no specific examples of actual courses that would utilize this exemption outside of those institutions, and no legal analysis (beyond the assertion just noted), the situation is the same as it was in the previous proceeding. In that proceeding, the Register's analysis of MOOCs' noninfringing use was limited to use of motion pictures in MOOCs offered by "accredited nonprofit educational institutions" because that is what was developed on the record. In her conclusion, she further explained that this lack of evidence resulted in the recommendation being limited to accredited nonprofit educational institutions:

the record does not support the sweeping approach suggested by proponents. Proponents' broadly framed proposal would seemingly encompass any online video that could be characterized as an educational experience. Upon examination of the record, however, the specific examples of proposed noninfringing uses submitted by the proponents all involve uses by faculty in courses offered by accredited educational bodies; although the Register is aware that some MOOCs operate independently of accredited organizations, no examples of purported noninfringing uses by these other (sometimes for-profit) MOOCs were provided to justify proponents' broad language.

2015 Recommendation at 102. In light of the fact that proponents have completely failed to proffer any examples of use by any other type of MOOC, the Register must again find that the record cannot substantiate the "sweeping" and "broadly framed" broad class.

Id. at n.479.

⁸¹ 2015 Recommendation at 75. In the footnote accompanying the text, she amplified this finding,

While [proponent] noted some MOOC offerers are nonprofits but not "accredited institutions," including Khan Academy, the World Bank, and National Geographic Society, proponents did not introduce specific evidence that these nonprofits are seeking to benefit from the proposed exemption.

2. Register Should Preserve the Other TEACH Act Requirements

As described above, there is no evidentiary case in this proceeding to extend the exemption beyond accredited, nonprofit educational institutions. In relation to the TEACH Act, although Joint Authors actually addressed only the requirement limiting the exemption to "accredited, nonprofit educational institutions," DVD CCA and AACS LA urge the Register to maintain the other requirements in the exemption that were based on TEACH Act requirements. The TEACH Act is directly related to the DMCA and manifests what Congress thought to be noninfringing. In fact, these limitations flowed from the recommendations of the Register of Copyrights, which resulted in the TEACH Act.

On May 25, 1999, the Register of Copyrights testified before the Senate Judiciary Committee on Copyright and Digital Distance Education.⁸⁴ The Register's testimony focused on the recommendations that the Copyright Office made pursuant to the DMCA's mandate that the Copyright Office study the application of copyright law to distance education using digital technologies and return to Congress within six months with those recommendations.

(a) "Enrolled Students"

The Register explained that limiting the law to "enrolled students" would permit Congress to eliminate the physical classroom requirement. While permitting instruction to take place anywhere would reflect the possibilities of distance education, the Register explained:

At the same time, it is important to retain meaningful limitations on the eligible recipients; the performances or displays should not be made available to the general public. We recommend permitting transmissions to be made to students officially enrolled in the course, regardless of their physical location. Since today's digital and scrambling technologies allow transmissions to be targeted more precisely, the requirement should be added that the transmission must be made solely, to the extent technologically feasible, for reception by the defined class of eligible recipients.

Comments at 0

⁸² Comments at 8.

⁸³ Technology, Education and Copyright Harmonization Act Of 2001, S. Rep. 107-31 at 5.

⁸⁴ Copyright and Digital Distance Education, Statement of Marybeth Peters, The Register of Copyrights, before the Committee on the Judiciary (May 25, 1999) available at https://www.copyright.gov/docs/regstat52599.html.

(b) Technological Measures to Prevent Retention and Further Distribution

The Register recommended that in updating the law for distance education Congress should include new safeguards. She explained, such safeguards were "critical" because "the transmission of works to students in digital form poses greater risks of uncontrolled copying and distribution, [which] could cause harm to markets beyond the primary educational market." "[A]ny transient copies permitted under the exemption should be retained for no longer than reasonably necessary to complete the transmission." She added, "when works are transmitted in digital form, technological measures should be in place to control unauthorized uses. In order to effectively limit the risks to copyright owners' markets, these measures should protect against both unauthorized access and unauthorized dissemination after access has been obtained." Congress therefore designed the law to require transmitting bodies or institutions to employ technological measures that "reasonably prevent retention of a work in accessible form . . . for longer than the class session; and unauthorized further dissemination of the work in accessible form."

(c) Policies Regarding Copyright Protection

The Register recommended as an additional safeguard the affirmative obligation of protecting copyrights. She explained, "those seeking to invoke the exemption should be required to institute policies regarding copyright; to provide informational materials to faculty, students, and relevant staff members that accurately describe and promote compliance with copyright law; and to provide notice to students that materials may be subject to copyright protection."

These recommendations from the Register resulted in the very same TEACH Act requirements that are imposed on the current exemption. As explained by the Register, these requirements addressed very real concerns about the potential unauthorized reproduction and distribution of the work. The Joint Authors have presented nothing in their case to address these concerns. (In fact, our investigation raises concerns that Decherney's own MOOC actually contains no such technological protection measures.) Since these concerns remain equally true today as they did when the Register initially testified, the Register should continue to impose the TEACH Act requirements.

=

⁸⁵ See 17 U.S.C. § 110(2)(D)(ii)

IV. Proponents Should Not Be Permitted to Make a New or Substantially Revised Case in Chief in Their Reply Submissions

In the comments, above, DVD CCA and AACS LA have focused their opposition to the various proposals on a number of instances showing the absence of relevant evidence or other supporting information. Based on that and the prior experience in past rulemakings, DVD CCA and AACS LA are concerned that some of the proponents will not limit themselves to just rebutting the evidence and arguments made in the instant comments, but instead use the reply comments to submit evidence and arguments that should have been made in their initial comments.

In the Notice of Proposed Rulemaking, the Copyright Office set forth the rules for the comment period:

The first round of public comment is limited to submissions from proponents (i.e., those parties who proposed new exemptions during the petition phase) and other members of the public who support the adoption of a proposed exemption

Proponents of exemptions should present their complete affirmative case for an exemption during the initial round of public comment, including all legal and evidentiary support for the proposal.

. .

The third round of public comment will be limited to supporters of particular proposals and those who neither support nor oppose a proposal, who, in either case, seek to reply to points made in the earlier rounds of comments. **Reply comments should not raise new issues, but should instead be limited to addressing arguments and evidence presented by others.** 86

Although the Copyright Office's instructions are clear, it may be helpful to consider the principles that trial courts use to resolve improper rebuttal evidence. In *Peals v. Terre Haute Police Dept.*, 535 F.3d 621 (7th Cir. 2008), the Seventh Circuit reviewed the trial court's decision to exclude improper rebuttal evidence. The Seventh Circuit noted:

the proper function of rebuttal evidence is to contradict, impeach or defuse the impact of the evidence offered by an adverse party. Testimony offered only as additional support to an argument made in a case in chief, if not offered to contradict, impeach or defuse the impact of the evidence offered by an adverse party, is improper on rebuttal.

See id., 535 F.3d at 630 (internal quotation and citation omitted).

⁸⁶ Exemptions to Permit Circumvention of Access Controls on Copyrighted Works, Notice of Proposed Rulemaking 82 Fed. Reg. 49550, 49558 (Oct. 26, 2017) (emphasis added).

Accordingly, proponents' reply submissions should not include introducing new evidence to respond to places where DVD CCA and AACS LA have pointed out that no evidence, or insufficient evidence, was submitted in the initial comments. DVD CCA and AACS LA respectfully request that the Copyright Office be vigilant and resist any effort to introduce improper evidence in these reply submissions.

V. There Is an Alternative to Circumvention

A. Screen Capture Can Be An Alternative to Circumvention

1. Screencasting Has Fueled the Improvement in Screen Capture Technology

The improvement in screen capture technology has been fueled by its employment as an educational tool, known as "screencasting," which serves a wide array of purposes:

- Training such as learning new software and orientations to new products.
- Teaching a lesson on a particular topic or showing a step-by-step process, in which students can learn material at their own pace or catch up on missed sessions.
- Selling a product.
- Blogging and YouTube communicating opinions, facts, and ideas, etc. 87

As described in an article of Educase Review,⁸⁸ a publication dedicated to the technological issues and needs of universities and colleges, "screencast is a digital video and audio recording of what occurs on a presenter's computer screen, and it can be used to create sophisticated, information-rich multimedia presentations." The most commonly employed examples of screencast in the professional world is the PowerPoint presentation with narration. The three tutorials on the Copyright Office's website describing this proceeding are examples of this type of screencast. These videos are built around the underlying PowerPoint presentation displayed on the computer screen and the narration is added like a "voice-over." The recording

⁸⁷ Ruffini, Michael, *Screencasting to Engage Learning*, EDUCAUSE Review (Oct. 31, 2012) available at https://er.educause.edu/articles/2012/11/screencasting-to-engage-learning (last visited Feb. 5, 2018).

⁸⁸ Educause is a higher education technology association and the largest community of IT leaders and professionals committed to advancing higher education. EDUCAUSE Review is the publication of the association's open-access digital and bimonthly print flagship publication for the higher education IT community.

⁸⁹ *Id*.

⁹⁰ Tutorials, Rulemaking Proceedings under Section 1201 of Title 17, U.S. Copyright Office available at https://www.copyright.gov/1201/.

can be accomplished by (i) PowerPoint's native screen capture tool, (ii) add-ins integrated with PowerPoint and offered by screen capture providers such as Camtasia, and (iii) external independent screen capture software again such as Camtasia or any other screen capture provider. ⁹¹

Screen capture products offer an array of features. The simplest product will simply record what is on your screen and save it in a format such as .avi, while other products will offer a suite of features such as "[video] editing, picture-in-picture, live streaming, and gameplay optimization." Screen capture products are offered at various price points 93 including free versions. 94

Almost all products include a free trial period. Some free versions are limited versions of the full price product. There are free products, which fully compete with the paid program such as OBS Studio.

OBS Studio is an open source screen capture technology that offers significant advantages to users concerned with high quality recording. TechRadar rated it best for gamers who want to record their game playing with a free software. ⁹⁵ It "supports both streaming and recording in high definition, with no restrictions on the number or length of your creations." *Id* OBS accomplishes this recording by recording "directly from [the] graphics card[.]" *Id*. This permits it to record "games running in full-screen mode (many other screen recorders can only record if the game is windowed). OBS Studio can also make full use of multi-core CPUs for improved performance, and can record at 60FPS (or even higher)." *Id*. This is fairly significant for gamers who have been using FRAPS. ⁹⁶ To preserve frame rate consistency gamers would have to balance game play with recording outputs.

These advances should better serve users of recorded DVD playback that complained about picture quality and frameloss.

⁹¹ See, e.g., Recording a Powerpoint with Screencast-O-Matic, YouTube available at https://www.youtube.com/watch?v=o3nphdE0wuc.

⁹² See Cat Ellis, *The Best Free Screen Recorder 2018*, TechRadar, available at http://www.techradar.com/news/the-best-free-screen-recorder.

⁹³ See Danny Chadwick, Best Screen Capture Software of 2018, TopTenReviews (Jan. 30, 2018) available at http://www.toptenreviews.com/software/utilities/best-screen-capture-software/ (last visited Feb. 12, 2018).

⁹⁴ See Ellis, supra note 92.

⁹⁵ *Id*.

⁹⁶ Fraps is universal Windows screen capture application that can be used with gaming technology. *See FRAPS, Real-time video capture & benchmarking* available at www.fraps.com.

2. Film Editing Can Clean Up Video Images

Any video needs some amount of postproduction editing. Film editing software can improve a pixelated image with "filters or tools that provide you with options for cleaning up 'pixilation' or 'mosaic noise." Video can also look pixelated due to the browser or player settings. There are multiple videos on YouTube to explain how to correct this. ⁹⁹

3. When Screen Capture Is Not Circumvention

This rulemaking proceeding has repeatedly recognized that screen capture can constitute an alternative to circumvention. In the last rulemaking the Register determined that at least some types of screen-capture software are "comparable to camcording the screen—a process that has been identified as a noncircumventing option to accomplish noninfringing uses" because the images are captured after they have been decrypted."¹⁰⁰

DVD CCA and AACS LA agree that this assessment remains true today. As noted in the past proceeding, WM Recorder describes its technology as follows:

Do any WM Recorder products violate the DMCA?

Short answer: No.

. . .

⁹⁷ https://www.techwalla.com/articles/how-to-clean-pixelated-video. A fuller explanation can be found at How to Fix a Pixelated Movie (Sep. 22, 2017) available at https://itstillworks.com/12570154/how-to-fix-a-pixelated-movie.

⁹⁸ See, e.g., Why Is Streaming Video Pixelated?, https://www.techwalla.com/articles/why-is-streaming-video-pixelated

⁹⁹ See, e.g., Tutorial - Youtube Video Pixelation Fix!, YouTube, available at https://www.youtube.com/watch?v=djHKe-7WxXA.

¹⁰⁰ 2015 Recommendation at 88. As far as evidence that screen capture is circumventing, the Register drew a conclusion that it could be because Apple restricted the ability of screen capture to record DVD playback. This restriction also applies to Apple's own native screen capture tools. While some screen capture could constitute a circumvention device, it would be inconsistent for Apple with its distribution of content through iTunes to offer such devices. However, screen capture most certainly implicates the reproduction right. Consequently, Apple's commitment to distribute content lawfully may be a more compelling reason for Apple to restrict the ability of any screen capture to record lawful playback.

Our stream recording technologies work by locating unencrypted media, and downloading that media as it is transmitted, in order to enable the user to view the content at a later time and/or on another device. We don't break any encryption, which is at the heart of the DMCA. ¹⁰¹

DVD CCA and AACS LA maintain that so long as the screen capture technology records unencrypted content that it has not caused to be circumvented, then the screen capture technology would not appear to violate the prohibition against circumvention.

B. Some Allegedly Noninfringing Activity Can Be Accomplished with Screen Capture

Below DVD CCA and AACS demonstrate that the new identifiable use can be accomplished with video obtained from screen capture.

1. Prosecutors Can More Readily Accomplish the Alleged Use thru Screen Capture

Screen capture software can be employed to record scenes for a movie to present to a jury. DVD CCA and AACS LA have included a clip that was made by using the Replay screen capture to record the scenes that were allegedly used by prosecutors as described in EFF's comments.

To the extent that the EFF proposal would enable users already covered under the to-berenewed exemptions but who, under the EFF proposal, would not be constrained by the need to use screen capture software instead of directly circumventing CSS or AACS technology, there is no showing that the existing restriction creates a hardship.

As DVD CCA and AACS LA have demonstrated in previous proceedings and have described below, and demonstrate in the screen capture-made clips submitted with these comments, the use of screen capture software is easy and inexpensive. As the existing (and to-be-renewed) exemptions provide, to the extent that particular users identified in those exemptions are unable to obtain the high quality needed for their uses, those particular users are granted an exemption to circumvent CSS or AACS to obtain the short segments that they need. There is no reason to remove that requirement from the exemptions that are to be renewed as a result of this proceeding.

_

 $^{^{101}}$ Available at . Applian's Replay, which DVD CCA and AACS LA have used in the prior proceedings, is the successor to the WM Recorder. It has nearly the identical statement on its website. See http://applian.com/support/legal

2. Screen Capture Technology Produces Sufficient Quality for Some Noninfringing Uses.

DVD CCA and AACS LA have included several clips from movies referenced in the various comments. The quality is sufficient that many uses that have been identified to be renewed can be accomplished even more readily with better quality video from improved screen capture technology.

Clip File Name	Screen Capture Technology	Machine
OBS The Town Clip1-4	OBS Studio 21.0.1	Toshiba Satellite (i7 processor with 8 GB)
RVC Scooby-Doo	Replay Video Capture 8	MacBook Pro (Windows)
RVC Good Will Hunting		
RVC Mrs. Doubtfire		
RVC GoT		

VI. Conclusion

For all of the reasons discussed above, DVD CCA and AACS LA urge the Register to recommend, and the Librarian to make, no modifications or additions to the exemptions already in existence and that the previously granted exemptions be renewed precisely as previously granted.

DOCUMENTARY EVIDENCE

Commenters are encouraged to submit documentary evidence to support their arguments or illustrate pertinent points concerning the proposed exemption. Any such documentary evidence should be attached to this form and uploaded as one document through regulations.gov.