LIBRARY OF CONGRESS COPYRIGHT OFFICE

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

Docket No. RM 2011-7

COMMENTS OF THE ADVANCED ACCESS CONTENT SYSTEM LICENSING ADMINISTRATOR LLC ("AACS LA")

Bruce H. Turnbull Turnbull Law Firm PLLC 5335 Wisconsin, Avenue, NW Suite 440 Washington, DC 20015 202-274-1801 turnbull@bhtlawfirm.com

David J. Taylor Right Size Law PLLC 621 G ST, SE Washington, DC 20003 202-546-1536 david.taylor@rightsizelaw.com

Table of Contents

I. II.	SummaryAACS LA					
	A.	Introdu	Introduction			
		1.	General overview of AACS	2		
		2.	AACS offers Authorized Copies of BDs, including potentially small portions of BDs	3		
	B.	General statement of facts concerning marketplace developments since the last rulemaking.				
		1.	Marketplace offers an array of sources for movies	4		
		2.	Marketplace offerings of alternatives to circumvention for copying short portions of works have improved	8		
III. IV.	Standard for Exemptions Pursuant to This Proceeding					
	A.	Any ex	emption based on these requests must clearly exclude AACS	17		
V.	AACS-Specific Exemption for Documentary Filmmakers					
	A. Proponents have not made a prima facie showing of substantial adverse effect on non infringing use of works distributed on AACS-protected BDs					
		1.	Documentary filmmakers' use of the AACS-protected copy of the work is a question of convenience	22		
		2.	Alternative sources of video content are reasonably available for the stated purposes	24		
VI.	AACS-Specific Exemption for Fictional Filmmakers					
	A.	A. Proponents fail to demonstrate that the prohibition against circumvention of AACS-protected BDs causes any substantial adverse effect on fictional filmmakers' noninfringing use				
VII.	AACS-Specific Exemption for Accessibilities					
	A. Works are often available with accessibility descriptions and do not require circumvention					
		1.	Many BDs have accessibility descriptions	27		
	B. Noncircumventing technologies could add accessibility descriptions to AACS-protected BDs					
		1.	BD Live is already available	31		
		2.	AACS LA is prepared to provide licenses to its technology for the purpose of enabling accessibility technologies			
VIII.	AACS-Specific Exemption for College and University Students or Faculty			32		

	A.	The proponents do not satisfy their prima facie burden				
		1.	The proponents fail to demonstrate any substantial adverse effect by aacs technology on noninfringing uses	33		
		2.	Statutory analysis weighs against granting the exemption	37		
IX.	AAC	S-Specifi	c Exemption for K-12 Educators	38		
	A.	Proponents have not met their burden of proof that there is substantial adverse effect on their noninfringing use				
		1.	Proponents do not show that K-12 educators regularly make use of multiple works distributed on AACS protected BDs in a one class session	39		
		2.	Proponents fail to demonstrate that only HD-Quality is satisfactory	40		
		3.	Alternative sources will provide sufficiently high quality video	43		
X.	AAC	AACS-Specific Exemption Made by Individual Proponents				
	A.	A. The proponents fail to allege the required elements to establish an exemption in this proceeding				
XI.	Conc	Conclusion				

I. Summary

The Advanced Access Content System Licensing Administrator, LLC ("AACS LA") offers these comments in response to requests for exemption from the prohibition against circumvention of our licensed technology, the Advanced Access Content System ("AACS"), as that technology is used to protect audiovisual content recorded onto Blu-ray Discs ("BD"). For the reasons provided in detail below, AACS LA believes that none of the requested exemptions related to AACS should be granted. There are three fundamental reasons why we take this position.

First, the requests related to AACS simply do not meet the standard required for approval of exemptions in this proceeding, as that standard has been articulated in the Federal Register notice initiating this particular rulemaking as well as in the recommendations and determinations in prior iterations of this exemption process.

Second, the BD market is still developing and those offering content using the AACS protections should be afforded the benefit of the full protection of the Digital Millennium Copyright Act's anticircumvention provisions for at least the next three years as the BD market matures. AACS is a robust, renewable protection system that has resisted easy "hacks" through both its state-of-the-art base technology and its ability to be renewed through revocation of compromised cryptographic keys. The AACS technology deserves the continued protection against circumvention that the DMCA provides.

Third, there are many alternatives to circumventing AACS technology available to meet the needs that have been put forward to justify the exemption requests. The digital marketplace is virtually exploding with alternatives for obtaining motion picture content for enjoyment in many different ways and on many different devices and platforms. Motion picture studios have

also enabled easy access to clips, or short portions, of their works, through websites that make clips available for streaming and through much streamlined (and often online) clip licensing programs.

II. AACS LA

A. Introduction

1. General overview of AACS

Advanced Access Content System, Licensing Administrator, LLC ("AACS LA"), is a cross-industry limited liability corporation that developed and licenses the Advanced Access Content System ("AACS") technology for the protection of audiovisual content on optical media, in particular Blu-ray Discs ("BDs"). The Founders of AACS LA are Warner Bros, Disney, Microsoft, Intel, Toshiba, Panasonic, Sony, and IBM.

In addition to utilizing up-to-date encryption technology generally, the AACS content protection system includes a number of other specific enhancements in its overall content protection system. Some of the effects of these enhanced content protection features include the fact that non-compliant devices and unauthorized reproductions of certain types of content are subject to technical enforcement actions that make them far less attractive for consumer use. The AACS key revocation capability means that a non-compliant device containing an AACS key may not playback newly released AACS content based on encryption key revocation. In addition, an unauthorized reproduction of AACS content onto a piece of recordable optical media (e.g., a recordable DVD or BD) may play back with no sound (after a certain "grace period") due to AACS' use of watermark technology as a supplement to its encryption.

2. AACS offers *Authorized Copies* of BDs, including potentially small portions of BDs

AACS LA requires that content companies allow consumers to make at least one copy of each disc that is protected with AACS technology. The technical mechanism through which make these copies are to be authorized is being finalized this spring, and consumers will be able to make their copies beginning later in 2012. The system overall is known as the "Managed Copy" system, since the ability to make copies will be "managed" in the sense that authorization for each copy must be obtained through an online server.

Using products developed by AACS licensees, consumers will be able to make copies of AACS-protected content to computer hard drives, and those copies will be allowed to be moved to other devices, such as tablets or smart phones. These copies are made according to a method known as a "bound copy method," since the copy will be "bound" to a particular device (although, as noted, it will be allowed to be moved from one device to another). Using a different product developed by AACS licensees, consumers will be able to make copies to certain types of recordable media, such as DVDs and SD cards.

The Managed Copy system is generally conceived of in relation to making a copy of an entire movie, allowing the kind of place shifting that Public Knowledge's filing seems to target. This system is also well suited to satisfy a number of other requests that have been made in this proceeding. For example, there is nothing in the licenses or other aspects of the system that require that a Managed Copy Output Technology enable a copy of the entire work. It is possible for an MCOT implementation to be developed to permit copying of short portions of Blu-ray Disc content, exactly the kind of short portions that several of the exemption requestors have in

¹ See generally Comments of Public Knowledge.

mind. This may be particularly applicable to the kind of classroom presentation materials that the several of the education-related exemption requests target.²

AACS LA is considering developing such an implementation, which if developed, could then be licensed for specified uses, including the kinds of classroom educational uses that are the subject of several of the requests in this proceeding. Alternatively (or perhaps additionally), AACS LA would certainly seriously consider a proposal from an educational institution for development of such a "short portion" copying system, again aimed at the kinds of classroom uses discussed in some of the exemption requests. In either case, AACS LA will keep the Copyright Office apprised of any developments that occur during the pendency of this rulemaking.

B. General statement of facts concerning marketplace developments since the last rulemaking

AACS sets forth immediately below those general facts about marketplace developments that it will rely on throughout its analysis of the proposed classes.

1. Marketplace offers an array of sources for movies

The digital video marketplace has exploded in the last few years, accelerating even faster in the past three years than in the prior period. Commercial entertainment content, whether current releases, catalog titles, or television programming, is available from numerous sources for use on many platforms and devices. Some content is available for consumers to keep permanently – via sale of physical goods or online download to consumer devices or recordable media – much is available for rent, including through downloads that time out after a specified

² See, e.g., Comments of Professor Renee Hobbs.

period, and still more content is available for streaming through a variety of network connections.

Services that were once tethered to in-home set-top-boxes are now offered for use on a variety of consumer devices, often regardless of the location of the device. Cable, satellite, and other home delivery services (such as Verizon's FIOS) compete in part on the flexibility and variety of services that they enable, including to mobile devices.

Services often have different levels or different versions, allowing consumers to choose between subscriptions, a la carte, rental, and download/purchase offerings.

An innovative new systems is UltraViolet, which has already launched with streaming services and will soon be offering the full-range of its functions – allowing downloading of content for copying and playing on up to 12 consumer devices, including portable ones for taking outside of the home, streaming to an unlimited number of devices regardless of location, and the option of removable media copies (either as the original way the consumer purchased the content, on either DVD or BD, or as a consumer made copy onto DVD or SD card recordable media). UltraViolet's membership includes major movie studios, virtually all of the consumer electronics and computer companies, the major game console providers, and backbone services providers.³

Disney expects to launch Disney Studio All Access ("DSAA") this year. DSAA is Disney's cloud-based content delivery and rights locker initiative, which will enable consumer access to over 250 Disney movies via streaming or download across a broad spectrum of consumer devices. www.DSAA.com

5

³ See Ultraviolet Alliance, UVVU.com, http://www.uvvu.com/partners.php (last visited Feb. 9, 2012).

Apple's iTunes video system is well known and very widely used by consumers, permitting movie and television programming content to be purchased or rented for playback on a variety of devices, including, of course, Apple's platform itself, including iPad, iPhone, and iPod type devices, but also including many non-Apple platform products. Apple's system allows multiple devices to have copies of the same content, giving flexibility for consumers to use a single purchase or rental.⁴

This past fall, Amazon launched the Kindle Fire, said by many commentators to be a major competitor to Apple's iPad platform. Amazon itself has thousands of movie and television titles that are available to Fire owners, and that content is also available for use on other devices through applications that are readily available.⁵

Android devices also have networks of content available, both through the Android Market and through use of applications that give consumers access to content on a variety of other distribution networks.⁶

Microsoft has its own platforms, taking advantage of its game console as a hub for content delivery as well as enabling Microsoft-based smartphones and computers.⁷

⁴ See Music, TV Shows, Movies, and More, Apple.com, http://www.apple.com/itunes/whats-on/(last visited Feb. 9, 2012).

⁵ See Kindle Fire, Amazon.com, http://www.amazon.com/dp/B0051VVOB2/ref=sa_menu_kdpo3 (last visited Feb. 9, 2012); Amazon Instant Video, Amazon.com, http://www.amazon.com/gp/video/ontv/start (last visited Feb. 9, 2012); Amazon Prime Members Enjoy, Amazon.com, http://www.amazon.com/gp/prime?ie=UTF8&tag=googhydr-20&hvadid=2480937525&ref=pd_sl_4jhisc5c2_e (last visited Feb. 9, 2012).

⁶ See Android Market, Android.com, https://market.android.com/movies?feature=top-nav (last visited Feb. 9, 2012).

⁷ See Zune on Xbox Live, Zune.net, http://www.zune.net/en-us/products/zuneonxbox/default.htm (last visited Feb. 9, 2012).

Physical media distribution, especially Blu-ray Discs, comes with a "digital copy" already included, allowing the consumer to transfer the file containing the copy from the disc to the hard drive of a computer, a smartphone or tablet, or recordable media.⁸

In addition, under the terms of the AACS LA agreements, with limited exceptions all BDs produced under that entity's final license agreements (since December 2009) are subject to the license's managed copy obligation, meaning that consumers will be able to make at least one copy of the movies found on BD, using a variety of alternative platforms for the copying (such as copying to a hard drive, to SD or Memory Stick memory cards, and to various recording media using Windows Media DRM).

Content is typically available in both standard definition and high definition, as supported by the consumer's device and as convenient for the consumer given network capabilities.

Content can also be downloaded to one device and side loaded to another device, so the viewing device does not need to be the vehicle for a download when that is not convenient.

The fact that most of these systems use a form of technological protection is not a reason to permit circumvention of those or other technologies (such as AACS). Using such technologies to enable access to or delivery of an authorized number of copies – and not more – or to avoid unauthorized distribution of the content over Internet or other network connections is

⁸ For website information about digital copies, both from the perspective of the content companies and from the perspective of a couple of the device and service providers, see *Fox Connect: Digital Copy*, http://www.foxdigitalcopy.com/ (last visited Feb. 9, 2012); *Warner Brothers Digital Copy*, http://www.wbdigitalcopy.com/home/#/Home (last visited Feb. 9, 2012); *Paramount Digital Copy*, http://www.paramountdigitalcopy.com/support/ (last visited Feb. 9, 2012); *Universal Hi-Def: Digital Copy*, http://www.universalhidef.com/digitalcopy/ whatisdigitalcopy/ (last visited Feb. 9, 2012); *Transferring or Downloading an iTunes Digital Copy*, http://support.apple.com/kb/HT1539 (last visited Feb. 9, 2012); *Disney File Digital Copy*, http://disney.go.com/disneyvideos/disneyfile/textonly.html (last visited Feb. 9, 2012); *Digital Copy: Insert. Transfer. Go*, http://www.amazon.com/Digital-Copy-DVD/b?ie= UTF8&node=721726011 (last visited Feb. 9, 2012).

precisely what Congress contemplated in enacting the DMCA. The fact that the DMCA is working to support the launch of a myriad of content delivery and consumer playback systems and models should be celebrated.

Services and systems that will be available this year to consumers include at least the following: UltraViolet, Flixter, Amazon (Instant Video and Prime), Blockbuster, Hulu and Hulu+, iTunes, DSAA, Microsoft Zune/Xbox, Netflix, Android Market, Playstation Network, Vudu, Redbox, BD sales, DVD sales.

2. Marketplace offerings of alternatives to circumvention for copying short portions of works have improved

a) Authorized uses of clips

(1) Online clip availability

Certain online sites offer short portions of many movies. Content providers supply and authorize clips on one such site, *www.anyclip.com*. Users are able to search the site's online library, which as of December 2011 included access to over 12,000 films and over 50,000 clips. More importantly, the site permits a user to make various uses of its clips including compiling clips into playlists (as a professor might wish to do for classroom use) and accessing the library with any API¹⁰ to incorporate clips into an application that the user is developing. The quality

⁹ See About Us, AnyClip.com, http://www.anyclip.com/pages/about/ (last visited Feb. 8, 2012); Paul Bond, *Universal First Studio to Make All Movie Clips Available Online*, HollywoodReporter.com (Mar. 7, 2011), http://www.hollywoodreporter.com/news/universal-first-studio-make-all-164835; Will Richmond, *AnyClip Licenses Warner Bros. Movies for Clip Library*, VideoNuze.com (Nov. 9, 2011), http://www.videonuze.com/article/anyclip-licenses-warner-bros-movies-for-clip-library.

¹⁰ The API is subject to a free license that limits the use of the clips accessed through the API for noncommercial purposes and in certain other ways. *See API License Agreement*, AnyClip.com, http://wiki.anyclip.com/anyclip-api/api-license-agreement (last visited Feb. 8, 2012).

¹¹ *Id*.

of the clips is sufficient that Universal Studios is using it to power their own 100th anniversary website.¹² For many of the uses described in the proposed classes, this site offers exactly what the proponents are requesting without any need for the circumvention.

(2) Online clip licensing

For uses where licensing from the content owner is appropriate, motion picture companies have moved much of their clip licensing to an online system.¹³ This is intended to simplify and shorten the licensing process. In some cases, the entire transaction can be completed online, including searching the studio's movies for the clip that is desired, putting clips into an online "cart" along with details of the proposed use of the clips. After the prospective user "checks out" using the site, the studio reviews the request and, if the studio agrees to the license, responds with a link to the desired clip. This process is far more straightforward, and less time consuming, than the filmmaker requests for exemption suggest.

b) Quality improvements and lower prices for screen capture software, video cameras, and video editing software

Since the last rulemaking, significant technological and marketplace developments have made possible various alternatives to achieve the noninfringing uses identified in a number of exemption requests, which may altogether eliminate any basis to grant those requests. While the effects of these developments on specific proposed classes are discussed further below, the following provides an overall discussion of several developments that we apply to a number of

¹² See Press Release, Universal Studios Chooses AnyClip to Reveal the Most Memorable Moments From 100 Years of Movie Making, Yahoo.com (Jan. 10, 2012), http://finance.yahoo.com/news/universal-studios-chooses-anyclip-reveal-180000935.html.

¹³ See Press Release, Universal Studios Chooses AnyClip to Reveal the Most Memorable Moments From 100 Years of Movie Making, Yahoo.com (Jan. 10, 2012), http://finance.yahoo.com/news/universal-studios-chooses-anyclip-reveal-180000935.html.

different exemption categories. We note that our discussion of the utility of these alternatives is limited to the context of this proceeding, where the use of any specific alternative is assumed to be for noninfringing purposes only. More importantly in the immediate context of this proceeding, that assumption is premised on the requirement that users would employ these alternatives to copy only "short portions" of audiovisual works from the playback of audiovisual content from DVDs. Finally, the discussion of the utility of these alternatives is intended to demonstrate only that viable alternatives to circumvention do exist. It in no way endorses these alternatives for any specific purpose, including the noninfringing purposes described by the proponents, and certainly in no way authorizes the use of a work either by the copyright holder or under the color of law.

The Register in her 2010 recommendation identified two specific reasons why video capture software and camcording (generically, "video recording") were not then viable alternatives for some of the circumvention requests: quality and cost. ¹⁴ On both of those fronts, the developments since 2010 have been significant. High-quality video capture software is now available for less than \$50, through at least one such product features an endorsement from a film studies teacher. Video recording using smartphones is both high quality and ubiquitously available. Most importantly, the resolution and audio quality of the recordings from either of these sources can now be improved significantly, even to broadcast quality, including as will be described below, through a "one click" approach of a video editing program that is available for under \$50. Each of these developments is discussed in more detail below.

¹⁴ See, e.g., Rulemaking on Exemption from Prohibition on Circumvention of Copyright Protections Systems for Access Control Technologies 61 (June 11, 2010) [hereinafter 2010 Rulemaking].

(1) Improved video capturing software offers high quality copies

In her 2010 Recommendation, the Register found that video capture software was a viable alternative that would satisfy some but not all uses. ¹⁵ Specifically video capture software did not satisfy those uses that required higher quality copies of the work, falling short in video and audio quality. ¹⁶ Pixilated video output reduced the overall quality of the copy, and audio quality was poor, out-of-sync with the video and in some instances not available at all. ¹⁷ Our research reveals that easily accessible products now exist in the marketplace that appear to remedy the problems that were seen in the products demonstrated in 2009. We believe that the Register should review these marketplace developments, to the extent that these products do not implicate section 1201's prohibition on circumvention (as the Register found they did not in her 2010 recommendation). While AACS LA does not endorse video capture software generally nor any particular software program, among the products we encountered in our own review is *Replay Video Capture* ("Replay") offered by Applian. ¹⁸

Replay allows the user to record the screen contents either as a WMV file or as a MPEG-2 file. According to Applian, Replay's "super-fast MPEG-2 codecs don't bog down your CPU, so you won't lose video frames or get choppy audio." Applian suggests that optimal

¹⁵ 2010 Rulemaking at 59.

¹⁶ *Id.* at 61.

¹⁷ *Id*.

¹⁸ See If You Can Watch it, You Can Record it With Replay Video Capture, Applian.com, http://applian.com/replay-video-capture/ (last visited Feb. 6, 2012).

¹⁹ *Id*.

²⁰ *Id*.

performance for recording a DVD requires putting Replay's recording window around the DVD player window, which should be set at 480 x 640 pixels, standard definition digital television.

Replay advertises a testimonial from a customer, who teaches film and media classes.²¹ Specifically, the customer uses the software to record clips from films and TV shows. The customer notes that other video capture software "had problems playing back the video or audio."²² "[Replay] worked first time and is simple to use. The quality of the playback is absolutely superb and there are no problems with audio synching."²³ The customer concludes, "Thanks to you my media and film lessons will actually feature some media and film!"²⁴

While our own informal observation of the software suggests minimum processing requirements do exist,²⁵ our "amateur" use of the Replay software otherwise performed consistently with the testimonial. Recording a DVD from an *Acer Aspire x3400G* desktop using this video capture software, the Replay software performed as promised. The video quality was very good, with no apparent color distortion or other degradation of the image quality. The English language subtitles were legible, and the actors' gestures and facial expressions were clear. The sound was also impressive.

²¹ Replay Video Capture Customer Testimonials, Applian.com, http://www.applian.com/replay-video-capture/testimonials.php (last visited Feb. 6, 2012) (testimonial of Chris J.).

²² *Id*.

²³ *Id.* While suggesting even the problems with other software may have been the result of his laptop being too old and slow, this instructor found that Replay's technology did not require his laptop to have topnotch processing speed, power and memory.

²⁴ *Id*.

²⁵ For example, the laptop described below for the smartphone recording could not support a DVD player and the Replay software.

The Replay Video Capture software and can be purchased for \$39.95. The significant performance improvement that this product represents, as well as its apparent popularity in a competitive marketplace, suggests that we may soon see similar low cost, high quality capture products from other companies. Again, while in 2009 the Register found that video capture software lacked the quality necessary for certain of the requested noninfringing uses, this finding should not presumed as true in 2012

(2) Video recording with a smartphone is high quality and affordable

Camera phones have made video recording vastly more accessible than in the periods covered by the prior rulemakings. In the last rulemaking, the Register found that then-available camcording techniques were cost-prohibitive due to the expense of the necessary equipment and that, while reasonably good, the quality of the copy was often considered inferior.²⁷ Today, however, a user can now create a video recording of what is shown on the screen easily with the video recording features of her own smartphone, a product widely available and owned by millions of American consumers.²⁸

²⁶ If You Can Watch it, supra note 18.

²⁷ 2010 Rulemaking at 59.

While camera phones have been in the marketplace for ten years, the quality of camera phones did not improve dramatically until the introduction of the Apple iPhone in 2007, which forced manufacturers to compete on adding innovative features including video recording. Since 2007, these "smartphones" have consistently improved year to year. Apple included video recording for the first time with its release of its 3GS in June 2009. That model offered VGA video at 30 frames per second ("frame/s"). The iPhone 4 model, released for the AT&T network in June 2010, offered 720p HD video at 30 frame/s. The iPhone 4GS, released in October 2011, offers 1080p Full HD video at 30 frame/s. *See iPhone* 4S, Apple.com, http://www.apple.com/iphone/specs.html (last visited Feb. 6, 2012). The next largest competitor in the smartphone market, Samsung, also offers 1080p HD video recording at 30 frame/s on its Galaxy SII model. *See Specification*, Samsung.com, http://www.samsung.com/global/microsite/galaxys2/html/specification.html (last visited Feb. 6, 2012).

A smartphone recording offers no less quality (than the camcording had), and rapid improvements in video recording features are likely to achieve higher quality than camcording demonstrated in prior rulemakings, and at a fraction of the cost. In fact, our own smartphone recordings — made under modest circumstances²⁹ — showed that the playback of such recordings resulted in quality that did not suffer from the defects that were found to be critical in the last rulemaking. Indeed observing the recording played back through Window Media Players on the same machine that played the DVD, the subtitles are legible, facial expressions and other gestures are discernable, and the sound, particularly when the audio portion is played back through external speakers, is sufficiently precise that nuanced inflections can be distinguished.

(3) Video editing software can significantly enhance the quality of a recording

To the extent that the quality of the "raw" smartphone recording (or other inexpensive high quality recorder) is not sufficient for a particular use, the advent of inexpensive, easy to use video editing software should be able to enhance the resolution to a satisfactory quality.

In the last rulemaking, even though camcording produced a good copy, the Register granted the classroom-related exemption in part because "a copy that appears adequate on a television screen may be quite grainy when displayed on a large screen in a classroom . . ."³⁰ Again, improved offerings in the marketplace can enhance the quality of the copy to render it usable for even these purposes.

²⁹ Playback of the work (Amelie) on DVD occurred on a Compaq Presario CQ60 laptop with a 15.6-inch screen. The playback of the audio portion was through Logitech speakers. The recording was made with an Android HTC, Incredible 2 that has video recording features of 1280x720 (720p HD).

³⁰ 2010 Rulemaking at 60.

There are numerous offerings of video editing software that more experienced users would be likely to have available for use³¹, and there are also programs now in the market that are quite simple to use even by novices. An example of the latter is vReveal offered by Motion DSP.³² With vReveal's toolbox, a user has various one-touch tools to deinterlace, sharpen, stabilize and remove grain and pixilation. If the user does not want to use these tools individually, vReveal has a "one-click fix" that will automatically run each enhancement.³³ The "Premium" (or full) version of vReveal 3 is priced at only \$49.99.³⁴

The discussion of these examples, video capture and smartphone video recording, plus easy video editing software, highlights that, for less than \$50.00, there are programs that can then be used repeatedly. Thus, there are viable alternatives available for at least many of the noninfringing uses identified in the proposed classes. A \$50 alternative is far better than the pricey investment for camcording that the Register found rendered camcording an impractical alternative for most of the noninfringing uses at issue in the last rulemaking.

³¹ A film professor, who is familiar with editing tools, would likely use the Video Spirit Pro, which amongst other things allows the user to join, split and extract images from video. The interface however is not intuitive for the first time user.

³² See Video Software, Reimagined, vReveal.com, http://www.vreveal.com/features (last visited Feb. 6, 2010). DVD CCA does not endorse this product, but rather mentions it as illustrative of developments in the marketplace

³³ A cNet reviewer of the software stated, "I'm impressed. Often times we are sent low quality video that is unacceptable for broadcast. We've turned a number of clips into acceptable on air video with this product." *vReveal CNET's Editors Review*, Cnet.com (Jan. 4, 2010), http://download.cnet.com/vReveal/3000-13631_4-10911245.html#userreview. His summary is very precise, "Short learning curve, easy to use, effective and a good value for the price." *Id.*

³⁴ *Top Reasons to Go Premium*, vReveal.com, http://www.vreveal.com/premium (last visited Feb. 6, 2012).

III. Standard for Exemptions Pursuant to This Proceeding

Relevant to our comments, below, there are three important points about the standard under which the Register and Librarian consider exemption requests.

First, as stated in the Notice initiating this proceeding, in order to be granted, the proponent of an exemption request must "bear the burden of proof that an exemption is warranted for a particular class of works "[by] providing sufficient evidence under this standard to support an exemption."

Second, the proof referred to in the first point must be in the form of "evidence either that actual harm currently exists or that it is 'likely' to occur in the ensuing 3-year period." Current harm must be shown in the form of "[a]ctual instances of verifiable problems," and [t]he standard of 'likelihood' requires proof that adverse effects are more likely than not to occur." Where the proponent argues that substantial harm is "likely to occur," the standard is met only "'in extraordinary circumstances in which the evidence of likelihood is highly specific, strong, and persuasive." Further, in relation to either actual harm or likelihood of harm, '[t]he identification of isolated or anecdotal problems will be generally insufficient to warrant an exemption. Similarly, the mere fact that the digital format would be more convenient to use for noninfringing purposes is generally insufficient factual support."

Third, any exemption request must be narrowly tailored to delineate "the class in relation to the relevant noninfringing use proven to be, or likely to be, adversely affected by the

16

³⁵ Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technology, Notice of Rulemaking, 76 Fed. Reg. 60,398, 60,400 (Sept. 29, 2011) (internal quotations omitted).

 $^{^{36}}$ Id.

³⁷ *Id.* (quoting the House Manager's Report)

³⁸ *Id.* at 60,400–01.

prohibition on circumvention, . . . while leaving the statutory prohibition against circumvention intact for that class with respect to other uses."³⁹

The Proposed Classes

IV. Proposed Classes Not Related to AACS-Protected BDs

Proposed Classes:

1, 2, 3, 4, 5, 6, 7a, 7b, 7c, 7e, 7f, 9a, 9b and 10a

Summary of Argument:

Because these proposed classes do not make any reference to AACS technology, any exemption created as a result of this triennial rulemaking should be explicitly limited to the relevant technological protection measure discussed by the proponents of the proposed class.

Facts:

The proposed classes do not include any reference to AACS technology.

Legal Argument:

A. Any exemption based on these requests must clearly exclude AACS

A number of the proposed classes for an exemption to circumvent technological protection measures for purposes of allowing "fair use" of the copyrighted work do not, by their express terms, apply to AACS technology. Accordingly, AACS LA requests that any exemptions granted based on these proposed classes clearly define the specific technologies subject to the exemption as their proponents identified those technologies in their respective requests. Based on our review of those requests, circumvention of AACS technology is not at issue in the following requests:

³⁹ 76 Fed. Reg. at 60,403.

- Proposed Classes 1-6 as they do not concern audiovisual works, and
- Proposed Classes 7A, 7B, 7C, 7E, 7F, 9A, 9B, and 10A as they do not relate to AACS-protected BDs.

V. AACS-Specific Exemption for Documentary Filmmakers

Proposed Class:

7D (partial – documentary films)

Summary of Argument:

AACS LA opposes the proposed class. The proponents have failed to establish a prima facie case that the prohibition against circumvention has (or likely will have in the next three years) a substantial adverse effect on the noninfringing use of a work distributed on AACS-protected BDs. The proponents fail to establish a nexus between AACS technology and the alleged harm. In fact, the proponents' proffer is void of any meaningful examples of works distributed on AACS-BDs. Thus, the alleged harm is wholly speculative. Even if the proponents had established harm as a result of AACS technology, which they have not, the availability of alternative means to make use of the work distributed on AACS-protected BDs, compels the result that the proposed class be denied. As proponents overstate documentary filmmakers' need for HD-quality content and fail to demonstrate any substantial adverse effect on their noninfringing of works distributed on BDs, the want for an exemption based on the proposed class is nothing more than a matter of convenience for documentary filmmakers. Thus, the Register should deny the request for the proposed class.

Facts:

AACS LA incorporates by reference those general statements of facts about market developments since that last rulemaking as part of its factual basis for its opposition to the

proposed class. It further provides immediately below additional facts relevant to this proposed class.

Documentary filmmakers go through the same process of filmmaking as all other filmmakers do. Indeed, documentary filmmaking may require more video editing work in the postproduction process because these filmmakers make use of footage that is from disparate sources, not shot with their own cameras.⁴⁰ Unless the documentary filmmaker licenses the use from the copyright holder, they must rely on footage in whatever form it is available. As explained by Tamsin Rawady, a producer of the documentary Bigger Stronger Faster:

One of the benefits of licensing a clip, in lieu of applying Fair Use, is that you also get access to a high-quality master. With Fair Use, you are on your own to find the highest-quality copy of the footage, which can take weeks and requires a great deal of manpower. We ended up "mastering" from sources as degraded as old VHS recordings of TV shows that we bought second-hand and from low-res online downloads for which no master source even existed. Post-production became more difficult as we had to convert and up-res all of these different formats to high-def. In a few cases, we actually decided to pay for the license of clips for which we knew we could employ Fair Use, simply to get the high-quality master. 41

Rawady and her co-producers' ability to make use of a work did not depend on access to a high quality copy of the work. VHS and online copies were available; however, those copies require more work in the postproduction stage. VHS copies of the work had to be converted to digital images, and the digital images had to be upconverted to HD. And while not mentioned, before upconverting to HD, Rawady and her team had to edit the digital images removing noise

⁴⁰ See, e.g., Oliver Peters, *Rock and Resolution: Tom Petty and the Heartbreakers: Runnin Down a Dream*, Videography.com (December 18, 2007), http://www.videography.com/article/57238 (describing how a 15 week project turned into two years by searching through thousands of hours of archival footage).

⁴¹ Tamsin Rawady, *Clip Show: A Practical Guide to Fair Use*, Documentary.com (Spring 2009), http://www.documentary.org/content/clip-show-practical-guide-fair-use.

and artifacts. Editing is not intended to turn the digital images into HD quality. Instead, editing is intended to make the quality of the digital images better than the quality of the VHS source.

The nature of documentary films permits lower image quality in certain segments because the audience expects a documentary to contain archival footage.⁴² A review of the October 25, 2011 release of Pearl Jam Twenty (Blu-ray) by High-Def Digest⁴³ explains this expectation best when the reviewer considers incorporating archival footage into a HD medium:

Inside the Blu-ray's cover, it reads,

"Elements of 'Pearl Jam Twenty' and related bonus content are taken from archival audio and video, and as such, they vary in consistency and quality." Aside from digitally recorded video footage from the 2000s and forward, the majority of what you see in the film comes from old VHS tapes and Hi-8 videos. As you would expect, the video quality is mostly very low. Crowe's interview footage and the more recent live recordings are sharp and glorious. Archival footage is clearly a product of its time. The intimacy of the film stems from the footage you see - from Jeff Ament and Stone Gossard's personal videos from 1989, from Eddie Vedder's pre-show reels and from the band's archival footage. 44

The reviewer notes that the "video quality is mostly very low" for the film footage from VHS tapes and Hi-8 videos – "[a]s you would expect." In dismissing the low quality video he explains, "Archival footage is clearly a product of its time."

⁴² See, e.g., Leo Enticknap, *Have Digital Technologies Reopened the Lindgren/Langlois Debate*, 27 Spectator 10 (2007) (describing the use of digitally simulated dirt and scratches to archival footage in order to satisfy a lay audience).

⁴³ High-Def Digest, a web publication, considers itself "the ultimate guide for BD enthusiasts who demand only the best that money can buy." *See About Us,* HighDefDigest.com, http://www.highdefdigest.com/aboutus.html (last visited Jan. 26, 2012).

⁴⁴ Luke A. Hickman, *Blu-ray Review: Pearl Jam Twenty*, HighDefDigest.com (Oct. 11, 2011), http://bluray.highdefdigest.com/5939/pj_20.html#Section3 (italics added).

⁴⁵ *Id*.

More importantly, the reviewer, an HD enthusiast, recognizes that the use of footage with low video quality does not outweigh the intrinsic value of the footage. "Had this old footage not been used, 'Pearl Jam Twenty' would not be the fantastic film it is",46

The reviewer's conclusions are instructive for documentary filmmakers transitioning to making films with overall HD quality. Even the most demanding HD audience does not expect HD quality all the time. ⁴⁷ Footage from VHS and other low quality video sources, once cleaned up for HD, can be effective in the storytelling even if the footage is less than HD quality. This lesson likely will come as no surprise, as this has always been the reality for documentary filmmakers.

Legal Argument:

AACS LA opposes the granting of this proposed class as an exemption would apply to AACS technology because (i) the proponents fail to demonstrate that the exemption is necessary for the alleged noninfringing use of AACS-protected works; and (ii) alternative means are reasonably available to documentary filmmakers to make the noninfringing use of "short portions of motion pictures."

⁴⁶ *Id*.

⁴⁷ In fact, if a viewer is focused on the film quality issues of a documentary it means the subject matter did not hold the viewer's attention, allowing the film quality to stand out. *See* Barry Hampe, Making Documentary Films and Videos: A Practical Guide to Planning, Filming, and Editing Documentaries 340 (2007).

- A. Proponents have not made a prima facie showing of substantial adverse effect on non infringing use of works distributed on AACS-protected BDs
 - 1. Documentary filmmakers' use of the AACS-protected copy of the work is a question of convenience

Documentary filmmakers have failed to identify any substantial adverse effect on their use of works distributed on AACS-protected BDs. Although the proponent repeatedly assert documentary filmmakers' need for high definition content from AACS-protected BDs in order to meet various marketplace "requirements" for documentary films, the actual evidence of such a need amounts to the level of anecdotal evidence⁴⁸ — and, at best, thin anecdotal "evidence." Jeffrey Schwartz states that "chances are high" that in future works he will need to pull clips from BDs is, by its very terms, simply speculation about future possibilities. While the other examples relate to works apparently in various stages of production, neither Alfred Spellman nor Usama Alshaibi identify any works unavailable to them due to AACS protection. In the absence of an identified title, the Register lacks any basis to evaluate whether the prohibition against circumvention has resulted in a substantial adverse effect. As indicated in the introductory section, above, for an exemption to be granted based on likely future harm "requires proof that adverse effects are more likely than not to occur" and "cannot be supported by speculation alone."

The proponents also assert that the in-production documentary entitled *Mormons Make*Movies will need access to HD quality clips from one specific work – Napoleon Dynamite – but

⁴⁸ Comments of International Documentary Association, et al., at 12.

⁴⁹ *Id*.

⁵⁰ *Id.* at 11–12.

⁵¹ 76 Fed. Reg. at 60,400.

this example fails to be persuasive.⁵² Even if the Register accepts the proponents' allegations about studio licensing policies as accurate, the description of the documentary suggests that it will likely portray the Mormon creators of movies positively, increasing the likelihood of the availability of a clip license. In fact, the proponents do not suggest that the filmmakers were unable to make use of the work or actually even encountered a problem obtaining the clip they claim to be necessary. Indeed, there is no evidence in this example that the filmmakers will be using only HD level material, since it is quite likely that various films that will be used have not been released in BD at this time, suggesting that DVD quality will be needed regardless of whether this exemption is granted.⁵³ Again, this example, like the others, fails to allege that the prohibition against circumvention has caused a substantial adverse effect to date, and in relation to the issue of whether the prohibition is *likely to cause* such a substantial adverse effect, the proffered evidence does not meet the requisite standard to grant an exemption.

As demonstrated above in the facts, documentary filmmakers' ability to circumvent AACS-protected BDs lawfully is, at best, purely a matter of convenience,⁵⁴ which is an insufficient basis to grant an exemption. An exemption to circumvent AACS will simply relieve documentary filmmakers of their age-old choice whether to seek a license for use of the work, which they know will be high quality, or to make do with the available copy of the work

⁵² Comments of International Documentary Association, et al., at 12.

⁵³ The filing also fails to identify any basis, beyond a mere preference, for the claimed "need" to access HD footage from this work for use in the documentary film.

⁵⁴ Rulemaking on Exemptions from Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies 114 (Oct. 27, 2003) (stating that the Register will not recommend an exemption based on a showing of de minimis inconvenience) [hereinafter 2003 Rulemaking].

knowing that with a certain amount of video editing work, they can have acceptable resolution quality.

2. Alternative sources of video content are reasonably available for the stated purposes

Clip licensing, as the proponents noted, offers documentary filmmakers the best source for the original footage of a work. Studios have active clip licensing services. Regardless whether the proponents have accurately described the problems with clip licensing practices, the first option for sourcing a suitable clip undoubtedly should be the copyright holder.

If a licensed clip is not available, documentary filmmakers can make use of the version of the work distributed on DVDs. Notwithstanding the proponents' suggestion to the contrary, 55 almost any work distributed on AACS-protected BDs is also available on DVDs. The DVD Copy Control Association, the licensor of CSS (the content protection for DVDs), indicates in its comments that it does not oppose the renewal of a clarified, narrowly tailored revision of the 2010 exemption. Accordingly, documentary filmmakers will likely be able to continue acquiring short portions of a work directly from the DVD.

In the absence of an exemption to circumvent protected DVDs, documentary filmmakers can still make a recording of a short portion of the work with (i) video capture software of a HD Internet source or from the playback of a DVD or (ii) or the playback from the BD with a smartphone. Even if the proponents believe the recording quality of such clips inferior, they can

24

bonus material may be found only on the BD copy, the need for this kind of material does not warrant an exemption. As reasoned in the 2003 Rulemaking for this very same issue of bonus material only being available on DVDs, the Register found that circumvention for access to this material is not warranted in large measure because an exemption would discourage content providers from distributing works in this medium. 2003 Rulemaking at 118–19.

utilize video editing software to improve the quality of that recorded video to an acceptable point for a program with overall HD-quality.

Finally, should documentary filmmakers not want to use any enhanced recording of the work, the National Archives multimedia collections contains nearly 300,000 reels of motion picture film and more than 200,000 sound and video recordings for viewing and copying. They can then scan the 35mm in digitally at their desired resolution. Studios do the very same to create an HD version of their works.

VI. AACS-Specific Exemption for Fictional Filmmakers

Proposed Class:

7D (partial – fictional films)

Summary of Argument:

AACS objects to the proposed class. From the very little evidence proponents proffer about fictional filmmakers, none of it concerns works distributed on AACS-protected BDs. Consequently, the proponents have offered little, if not nothing, to establish a prima facie case that the prohibition against circumvention has caused (or is likely to cause) a substantial adverse effect on fictional filmmakers' noninfringing use of works distributed on AACS-protected BDs. The proposed class must be denied.

Facts:

AACS LA incorporates by reference those facts set forth (i) in its general statement of facts about the developments in the marketplace since the last rulemaking and (ii) in the fact statement above for documentary filmmakers.

⁵⁶ Research in Federal Records and Presidential Materials by Media Type, Archives.gov, http://www.archives.gov/research/start/by-format.html (last visited January 30, 2012).

Legal Argument:

A. Proponents fail to demonstrate that the prohibition against circumvention of AACS-protected BDs causes any substantial adverse effect on fictional filmmakers' noninfringing use

The second part of the filmmakers' proposed class would permit fictional filmmakers to make use of short portions of works distributed on AACS-protected BDs. Proponents however fail to proffer a single example where the employment of AACS to protect the BD version of the work prevented a fictional filmmaker's use (or even considered use). Indeed, proponents failed to include any example – regardless of the source for the work – involving the actual use of a short portion of a work within a fiction film. In short, the proposed class, including the alleged noninfringing use, is nothing more than speculation. Consequently, the proposed class for fictional filmmakers does not even satisfy the threshold requirements of the evidentiary burden that proponents have in this proceeding.

Even assuming that the proponents could demonstrate noninfringing use with speculative statements, the proponents still cannot satisfy their prima facie burden that the prohibition against the circumvention of AACS has a substantial adverse effect on noninfringing use of works by fictional filmmakers. The legal arguments stated, above, against a proposed class for documentary filmmakers apply with equal force to the proposed class for fictional filmmakers as any evidentiary rehabilitation for the proposed class of fictional filmmakers rests squarely rests on proponents' argument in support of the class of documentary filmmakers. Accordingly,

⁵⁷ Comments of International Documentary Association, et al., at 19.

AACS LA reasserts all but one⁵⁸ of those legal arguments against a proposed class for fictional filmmakers.

VII. AACS-Specific Exemption for Accessibilities

Proposed Class:

9C and 9D

Summary of Argument:

AACS LA believes that the marketplace has worked to enable accessibility technologies for many movies, including those released on BD, and that the interests of having such technologies included in most or all movies, again including those released on BD, would be better served by allowing the marketplace to continue to develop. If the Register nevertheless believes that it is essential to recommend an exemption for this purpose, AACS LA requests that such an exemption be modified from the requested exemption, so that it is narrowly tailored to circumstances in which the relevant accessibility descriptions are not already available for the specific work either natively on the AACS-protected BD or via an alternative noncircumvention method such as those discussed below.

Facts and Legal Argument:

A. Works are often available with accessibility descriptions and do not require circumvention

1. Many BDs have accessibility descriptions

Content providers are releasing many DVDs and BDs with video description and audio captions (generically, "descriptions"). Audio captions, which are either open caption or closed

27

⁵⁸ Since DVDCCA objects to the extension of an exemption to fiction filmmakers, an exemption to circumvent CSS-protected DVDs may not be available to fictional filmmakers.

caption,⁵⁹ render the audible portion of a film into text for the benefit of hearing impaired and deaf people. Similarly, video description assists visually impaired and blind people with the visual portion of the film by providing a narration of the visual elements of the film such as "actions, settings, facial expressions, costumes, and scene changes." Movie studios add video description and audio captions to a film in the course of the post-production process. These descriptions are then included for the film's theatrical release. When the film is released again for the home viewing market, these descriptions can be, and often are, included in DVDs and BDs.

The Media Access Project identifies films released with audio captions and video description. In January 2012, eighteen (18) current releases have both audio captions and video description including: *Alvin and the Chipmunks, The Girl with the Dragon Tattoo, J. Edgar, The Muppets, Shame, and We Bought a Zoo.* These eighteen titles are among some six hundred thirty-three (633) titles that the Media Access Project has identified containing both descriptions when released as first-run movies. Comparing those titles identified by the Media Access

⁵⁹ Open caption means that entire audience may view the audible portion of the work that is rendered into visual text. Typically, the text is "burned into" the work. Closed caption means that audience members must choose to see the visual text.

⁶⁰ See Nondiscrimination on the Basis of Disability; Movie Captioning and Video Description, Advanced Notice of Proposed Rulemaking, 75 Fed. Reg.43,467, 43,468 (July 26, 2010).

⁶¹ Public Television Station, WGBH, is home to the Media Access Group, which has pioneered accessibility technologies for both TV and film. *See Media Access Group at WGBH*, WGBH.org, http://main.wgbh.org/wgbh/pages/mag/ (last visited Feb. 6, 2012). This includes Rear Window Captioning System and DVS Theatrical, which permit deaf, hearing impaired, blind and visually impaired people to enjoy films during their theatrical runs in those theaters that have adopted the Motion Picture Access ("MoPix") system.

⁶² Making Movie Theaters Accessible to Disabled Audiences, WGBH.org, http://ncam.wgbh.org/mopix/index.html#currel (last visited Jan 24, 2012).

⁶³ *All MoPix Films*, WGBH.org, http://ncam.wgbh.org/mopix/mopixmovies.html (last visited Jan. 24, 2012).

Project to the top ten movies in gross sales for 2011,⁶⁴ seven of the top ten movies were released with audio caption and video description.⁶⁵ The remaining three of the top ten movies were released with audio caption.⁶⁶

While audio captions are much more pervasive than video description, the availability of video description is improving. Even after the Federal Communication Commission's initial regulations were overturned,⁶⁷ voluntary efforts made progress.⁶⁸ With passage of the *Twenty-First Century Communications and Video Accessibility Act of 2010* ("21st CCVA"),⁶⁹ a legal mandate for video description now exists that will create more market pressure to include video description in all films.⁷⁰

Even in the absence of a legal mandate and its effects on the motion picture industry, content providers are voluntarily making their films more accessible to blind and visually

⁶⁴ See 2011 Domestic Grosses, BoxOfficeMojo.com, http://boxofficemojo.com/yearly/chart/?yr=2011&p=.htm (last visited Jan. 24, 2011).

⁶⁵ They included: Harry Potter and the Deathly Hallows Part 2, The Twilight Saga: Breaking Dawn Part 1, The Hangover Part II, Pirates of the Caribbean: On Stranger Tides, Fast Five, Cars 2, and Sherlock Holmes: A Game of Shadows. Id.

⁶⁶ They were *Thor*, *Transformers: Dark of the Moon*, and *Mission: Impossible - Ghost Protocol. Id.*

⁶⁷ See Motion Picture Ass'n of America, Inc. v. FCC, 309 F.3d 796 (D.C.Cir.2002) (holding that the FCC lacked the statutory authority to promulgate the video description regulations).

⁶⁸ See Media Access Project, MAG Guide Vol. 3, WGBH.org, http://main.wgbh.org/wgbh/pages/mag/resources/guides/mag_guide_vol3.html (last visited Feb. 6, 2012) (noting that even though the video description regulations were void, broadcasters and cable providers were committed to "honor the spirit of the FCC's intention -- to provide greater access to television for people who are blind or visually impaired").

⁶⁹ Pub. L. 111-260, 124 Stat 2751 (2010).

⁷⁰ Because the regulations are imposed on broadcasters and cable providers, which control a downstream market for the distribution of films, studios, which want to distribute their films in these markets, will need to ensure that their films comply with the video description requirements before broadcasters and cable providers will be willing to transmit studios' films into their markets.

impaired people. Advocates for accessibility acknowledge that the availability of video description is improving. The Audio Description Project ("ADP"), an Initiative of the American Council of the Blind, notes

2010 proved that we've turned the corner on availability of [video] description tracks on DVDs, with more first-run movie DVDs released than all previous years combined. Several major studios (Sony, Universal, and Disney-Pixar) have committed to description on their DVDs and Blu-ray discs whenever they contract for it in the original movie.⁷¹

Content providers, similarly, have made significant strides in including audio captions in their works. As already discussed the top 10 movies for 2011 each included audio captions.

Advocates for hearing impaired and deaf people have acknowledged this reality too. In explaining when captioning is required, the *National Association of the Deaf* stated:

Closed captioning has been provided on a voluntary basis by many movie producers, studios, and distributors for movie videos and DVDs produced for sale or rent. Today, captioning is also being provided by movie studios and distributors for most wide-release movies. These captions are being displayed by hundreds of movie theaters nationwide.⁷²

There is also a risk that an exemption would create a situation in which those who would develop techniques relying on circumvention could actually stunt the growth of the marketplace solutions for these concerns.

⁷¹ See The Audio Description Project, DVDs and Blu-ray Discs With Audio Description, ACB.org, http://www.acb.org/adp/dvds.html (last visited Jan. 24, 2012).

⁷² See National Association of the Deaf, When is Captioning Required?, NAD.org, http://www.nad.org/issues/technology/captioning/when-required (last visited Dec. 24, 2012). This is consistent with MPAA statements as well, that films released by its member companies containing closed captioning grew from 75 % in 2006 to 88% in 2008. See Comments of the MPAA at 6, CRT Docket No. 112; RIN 1190-AA63 (Aug. 18, 2008) (filed in DOJ, Nondiscrimination on the Basis of Disability; Movie Captioning and Video Description, CRT Docket No. 112; RIN 1190-AA63).

B. Noncircumventing technologies could add accessibility descriptions to AACS-protected BDs

1. BD Live is already available

BD Live, which is an online interactive service that can update a BD with additional content, firmware and social networking features such as chat, is one such technology. For example, if the work distributed on BDs did not include subtitles in Farsi, content providers can use BD Live to distribute Farsi language subtitles to discs even after they are in the consumers' homes. Once the consumer downloads the Farsi subtitles from BD Live, she can enjoy the work with subtitles in Farsi. Similarly, if content providers discover a scribe error in the SDH track, a BD Live update could download to the BD a corrected SDH track.⁷³

2. AACS LA is prepared to provide licenses to its technology for the purpose of enabling accessibility technologies

To the extent that those who are developing accessibility technologies need a license for AACS in order to develop or use their technologies, AACS LA welcomes the opportunity to license such developers and their products in order to enhance accessibility of works to people who are deaf, hearing impaired, blind or visually impaired. We invite representatives of companies or groups serving those communities to contact us with ideas on how we can be helpful in making BDs more accessible. We offer this as a meaningful alternative to circumvention, designed to enable the accessibility descriptions discussed in the proposed class

31

⁷³ To the extent that some video programming comes with accessibility descriptions that require correction or augmentation, the argument typically does not apply to prerecorded works distributed on BDs. As already noted, BD Live, implemented with many BDs since 2008, allow corrections or supplements to be provided, sometimes by users themselves.

without the negative side effects on the works that could be the result of permitting the circumvention of AACS technology.

VIII. AACS-Specific Exemption for College and University Students or Faculty Proposed Class:

7G

Summary of Argument:

AACS LA objects to the proposed class. Proponents fail to establish a prima facie case that the prohibition against circumvention of works distributed on AACS-protected BDs has caused (or likely will cause in the next three years) a substantial adverse effect on the noninfringing use of works distributed on AACS-protected BDs. The proponents fail to establish any relationship between their pedagogic purposes and actual works distributed on AACS-protected BDs. Their need to make use of a 4K projector is wholly a matter of convenience. Furthermore, even if harm were assumed, such harm would be mitigated by the inherent capabilities of BDs. Managed copies would permit professors to make a compilation of clips on their harddrives. Furthermore, managed copy should be able to allow a work to move a copy on to the server of a 4K projector. Finally, because the transition from DVD to BD is far from complete, any exemption at this point is premature, and ultimately puts at risk the transition to BD.

Facts:

AACS LA incorporates by reference those facts as they are set forth in its general statement of facts about developments in the marketplace since the last rulemaking.

Legal Argument:

A. The proponents do not satisfy their prima facie burden

- 1. The proponents fail to demonstrate any substantial adverse effect by aacs technology on noninfringing uses
 - (1) The Proponents Fail to Relate the Need for BD Quality Copy to Any Works Distributed on AACS-Protected BDs

The proponents fail to draw any relationship between their pedagogical needs and works distributed on AACS-protected Blu-ray discs. Identifying the technological measure has been a basic requirement of this proceeding to establish whether a noninfringing use has been or will be adversely affected. In the 2003, Rulemaking the Register stated, "the identification of the particular technological measure to the prohibition applies is necessary to examine whether the use was in fact prevented by the technological measure"⁷⁴ The main example concerns student-made videos involving Internet advertising. Student-made videos are not distributed on AACS-protected BDs, and assuming that the students' videos incorporated clips from Internet advertisements, AACS is not employed to protect Internet streams.

Nevertheless, even assuming *arguendo* that the example is relevant to AACS-protected BDs the students could have made use of the works with alternatives to circumvention. As already explained, a smart phone recording along with video editing software could have enabled the students to make clips of works distributing on AACS-protected BDs. The probability that the students likely used software to capture the Internet stream and then edited the content demonstrates how practical video editing software really would be.

The proponents further argue that university courses would be enhanced with access to high-quality images. A biology class could watch a cell split, while a psychology class could

⁷⁴ 2003 Rulemaking at 91.

⁷⁵ Comments of Peter Decherney, et al. 14 [hereinafter Comments of University Professors].

observe facial expressions.⁷⁶ Even if that is true, the proponents have not shown that they have been denied access to such images because the desired works are protected by AACS. In fact, the proponents have not identified any work protected by AACS that offers the desired images. In the absence of specific titles the professors' proffer amounts to mere speculation. In the 2003 Rulemaking, when considering the proposed class—audiovisual works embodied in DVDs encrypted by CSS—the Register stated:

Unless a proponent can show that the particular use to be made of an audiovisual work required use of the DVD version of that work and that the prohibition on circumvention prevents that use, an exemption is unsustainable. While some commenters mentioned uses that may theoretically qualify as a fair use, specific facts were not provided and it was not shown that this work was unavailable in an unprotected format. Moreover, these comments tended to be vague and brief in their discussions of the facts.⁷⁷

Similarly, these proponents have not shown that the desired use of the work requires circumvention of AACS. In the absence of specific facts, it is impossible to evaluate whether the prohibition prevents the use or whether the work is unavailable in an unprotected format.

(2) Inability to make use of a 4K projector is not related to AACS-protected BDs

The prohibition against circumvention is not the cause of any harm arising from any inability to playback AACS-protected Blu-ray discs in digital cinema theaters. Specifically, the proponents point to the inability to make use of Bucknell University's 4k projector, which is part of its digital cinema system. Bucknell University has a Barco system, which is one of three manufacturers that have licensed the technology to enable digital cinema experience. First,

⁷⁶ Comments of University Professors at 14–15.

⁷⁷ 2003 Rulemaking at 125.

⁷⁸ Comments of University Professors at 14.

⁷⁹ [??]

Bucknell and other colleges or universities that have invested in digital cinema systems should look to the digital cinema distribution system as the content source for those systems. A 4K projector is intended for digital cinema (*i.e.*, movie theaters), where first-release films are distributed on hard drives⁸⁰ to the theaters, uploaded onto a server and then projected on to the theaters' screens.

Second, AACS's Managed Copy system, in particular the bound copy method, would enable the making of a server copy for 4K projectors (recognizing that the player for such a copy would have to incorporate upconverting capability).⁸¹

To the extent that a 4K projector maker has not incorporated AACS-BD playback capability (or is not able to stream content from new BD players with 4K upconverting capability), there is no basis for an exemption. Since the very first proceeding, the Register has explained that "there is no unqualified right to access a work on a particular machine or device of the user's choosing." At the time, the Register was evaluating a proposed exemption for those proponents, who wanted to playback CSS-protected DVDs on a Linux player. In 2003, even after Linux players failed to come to market as hoped, the Register still denied an exemption for Linux players.

⁸⁰ Media sources can also include BDs, DVDs, and satellite signals. Because native 4K resolution constitutes so much data, the uncompressed data representing the 4K work must be shipped on a hard drive.

⁸¹ The BD marketplace is moving in that direction with respect to consumers who desire a 4K experience. Sony recently announced that it will introduce a Blu-ray player that upconverts BDs for 4K projection. While unclear how or when these developments in the consumer market will present an alternative for sourcing content for digital cinema operators, it suggests that some convergence is likely. *See*, *e.g.*, *Sony Unveils Ultra High-Def Projector*, Time.com (Sept. 8, 2011), http://techland.time.com/2011/09/08/sony-unveils-ultra-high-def-4k-projector-so-long-1080p/.

⁸² Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies, Final Rule, 65 Fed Reg. 64,556, 64,569 (Oct. 27, 2000).

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.⁸³

Consequently, digital cinema operators, including facilities owned by universities, have no legal basis to insist that they should be able to playback works distributed on AACS-protected BDs on their 4K projectors than proponents had in the Linux-CSS context nine years ago.

(3) Proponents have not alleged that they need to circumvent AACS to make clips for classroom use

Proponents do not affirmatively allege that the prohibition prevents them from making use of clips of works distributed on AACS-protected Blu-ray discs. Instead they explain that alternative to circumvention would not satisfy these uses. But the proponents get ahead of themselves. First, they must show harm exists. Absent that showing, there is no need to demonstrate that those alternatives to circumvention are inadequate.

Even if proponents had affirmatively showed harm exists, AACS' Managed Copy system, in particular the bound copy method, would negate any harm. As previously explained, AACS bound copy method permits a user to copy the underlying work, including a short portion, onto a hard drive. Thus "clips" of works could be compiled on a laptop's hard drive and played back in class as needed. Moreover, the other alternatives to circumvention noted in the introductory section to this filing are all potentially applicable to this situation. The descriptions of those alternatives are hereby incorporated by reference in this section.

36

 $^{^{\}rm 83}$ 2003 Rulemaking at 145 (concluding that rejecting the exemption for an unlicensed Linux player).

⁸⁴ There are suggestions of such use when the Proponents argue why alternatives to circumvention are not satisfactory. Comments of University Professors at 18–19.

2. Statutory analysis weighs against granting the exemption

a) A premature exemption could harm the market transition for BD

The growth of the market for works distributed on AACS-protected Blu-ray discs depends on the prohibition against circumvention. Content providers rely on AACS to distribute HD quality copies of their works to consumers. In the absence of AACS protection, content providers would not be willing to distribute these works with HD quality.

At this point, the market is replete with alternative means of getting content to consumers, including in HD quality. In addition, the transition to Blu-ray disc from DVD is far from complete, as noted in a number of places above. In the last rulemaking, while the Register acknowledged that a transition from DVDs to Blu-ray discs is underway, ⁸⁵ Blu-ray had not yet gained sufficient traction. Its insignificance in the market resulted in a dearth of evidence in the record relating to Blu-ray discs. ⁸⁶ Consequently, the Register concluded then that further consideration of an exemption to circumvent Blu-ray discs was not warranted.

These circumstances best undercut the proponents' suggestion that the 2010 exemption, which was limited to DVDs, somehow took away a benefit that the proponents enjoyed from the 2006 proceeding because that rulemaking provided an exemption for "audiovisual works." However, the record for the 2006 proceeding closed prior to Blu-ray discs entering the marketplace. The Register received the responses from those witnesses whom the Register had propounded written questions in the summer of 2006. Content providers had not released their first works on Blu-ray discs until June 20, 2006. Consequently, when the Register issued her

⁸⁵ 2010 Rulemaking at 57.

⁸⁶ *Id.* at 43 n. 162.

⁸⁷ Comments of University Professors at 12–13.

recommendation on November 17, 2006, there was no need to distinguish between DVD and Blu-ray formats. In the absence of a record to support the exemption, any interpretation of the exemption to include Blu-ray discs is misguided.

While Blu-ray discs are now established in the marketplace, they have a long way to go before they equal the popularity of DVDs with American consumers. At the end of 2011, the total sales from Blu-ray discs were still dwarfed by the total sales of DVDs, \$2 billion and \$6.8 billion, respectively. 88 In January 2010, the number of U.S. households with a DVD player was 100.6 million. By the summer of 2011, the number of U.S. households with Blu-ray devices was only 31.6 million.

The Register's recommendations in the earliest rulemakings created the conditions for DVDs to succeed in the marketplace. DVDs had the benefit of two complete triennial periods before the Register created the first exemption in 2006. Not until 2010 did the Register find that the DVD market could tolerate a number of exemptions. Regardless whether a direct comparison between the development of the DVD market and the BD market is warranted, granting an exemption to circumvent AACS-protected BDs at this point is premature as the BD market is still developing.

IX. AACS-Specific Exemption for K-12 Educators

Proposed Class:

8

Summary of Argument:

⁸⁸ See, e.g., Mike Snider, Blu-ray Grows, But DVD Slide Nips Home Video Sales, USAToday.com (Jan. 9, 2012), http://www.usatoday.com/tech/news/story/2012-01-10/blu-ray-sales-2011/52473310/1.

AACS LA opposes the proposed exemption on the grounds that the proponents fail to demonstrate a causal nexus between AACS and the alleged adverse effect on the noninfringing uses of a work that K-12 educators may make; alternative means are available for these educators to access and make use of works without resorting to circumvention of AACS-protected BDs. Therefore, the proposed class should be denied.

Facts:

AACS LA incorporates by reference those facts set forth in its general statement of facts about marketplace developments since the last rulemaking

Legal Argument:

- A. Proponents have not met their burden of proof that there is substantial adverse effect on their noninfringing use
 - 1. Proponents do not show that K-12 educators regularly make use of multiple works distributed on AACS protected BDs in a one class session

Proponents fail to show that the prohibition against circumvention has resulted in, or likely will result in, a substantial adverse effect of K-12 educators' use of works distributed on AACS-protected BDs. This rulemaking has previously created exemptions premised on minimizing the loss of classroom time if the instructor wished to use several different works in a single classroom session. Here the proponents suggest that the use of merely one work in a single classroom session results in substantial adverse effect. Common sense suggests that cannot be right. In the last rulemaking when the Register granted an exemption to circumvent

⁸⁹ See 2006 Rulemaking at 24; 2010 Rulemaking at 64.

⁹⁰ Reviewing proponents' evidence most liberally, the Proponents' example involving the documentary of *Edward R. Murrow: This Reporter* and the movie *Good Night, and Good Luck* could involve a lesson comparing the works where the use of clips on a compilation could be timesaving. Comments of Professor Renee Hobbs at 3. However, the proponents did not suggest this.

CSS-protected DVDs (in part for the same reason the exemption had been granted in the 2006 Rulemaking), the Register cautioned that "in some cases, professors needing to perform only one clip in a class may be able to use the CSS-protected DVD itself in a DVD player by cuing the scene up before class."91 This suggestion is an equally compelling (and practical) solution that experienced teachers make use of everyday – they prepare the device before the class begins.

The Proponents' argument is premised on current alternatives to an exemption not being ideal for teaching purposes. However, that argument admits that there are available alternatives like online streaming from websites offering clips (including anyclip.com, which allows preparation of a series of clips from different movies in a playback sequence), using VHS, or employing video capture software or the video recording function of modern smartphones. 92 As such, the Proponents do not claim that the current prohibition results in a substantial adverse effect on their noninfringing use, but that they are inconvenienced by the current prohibition. A mere inconvenience is not sufficient grounds for an exemption. 93 Moreover, as noted above, in the BD context, the managed copy feature of AACS-protected Blu-ray discs may prove to be an effective alternative

2. Proponents fail to demonstrate that only HD-Quality is satisfactory

Proponents fail to demonstrate how the pedagogical purposes of K-12 educators can only be satisfied by the use of a HD-quality copy of the work. In the last Rulemaking when the Register granted an exemption premised on the need for a high quality copy of the work, she reiterated the basis for granting such an exemption:

⁹¹ 2010 Rulemaking at 63.

⁹² Comments of Professor Renee Hobbs at 2.

⁹³ Exemption to Circumvention on Circumvention of Copyright Protection Systems for Access Control Technologies, Final Rule, 75 Fed. Reg. 43,825, 43,826 (July 27, 2010).

[F]or older works, the DVD version of a motion picture can preserve the color balance and aspect ratio to accurately reflect how the original work would have appeared when it was originally released in theaters. The record does not reveal sufficient viable alternatives to the DVD version of the motion pictures for this purpose. For instance, VHS versions of the films altered the color balance and aspect ratio. Similarly, the demonstration at the hearing of screen shots with a digital video recorder revealed dramatic color distortions and greatly reduced picture quality. While these options may have satisfied the needs of many types of noninfringing users and even many noninfringing educational uses – e.g., those wanting to comment on the historical context of a film or create a parody, or to how a film clip in a class unrelated to cinematographic significance – the reduced quality of alternative formats was wholly insufficient for the pedagogical purposes for which the clips were sought in film and media studies classes. ⁹⁴

Here, proponents do not draw any nexus between their desire for high quality images and any actual pedagogical value of that quality (*i.e.*, why the HD copy available on Blu-ray is better suited for their educational purposes). Proponents however suggest that "low resolution videos are completely insufficient for detail-oriented lessons, such as those on the workings of biological organisms in science class or ornate costume design in theater class." While this may be proponents' best explanation for why HD is necessary to satisfy K-12 educators' pedagogical purposes; ⁹⁶ it in no way suggest that only HD quality satisfy these requirements, nor any connection with the images necessary for these uses and any motion picture protected using AACS. Their arguments are little more than speculation, insufficient to make the requisite showing for an exemption to be granted. Notwithstanding the fact that K-12 educators have long managed to teach biology and drama classes without access to HD, ⁹⁷ proponents fail to explain

 $^{^{94}}$ 2010 Rulemaking at 25 (citing 2006 Rulemaking at 20).

⁹⁵ Comments of Professor Renee Dobbs at 2.

⁹⁶ The two scholarly articles cited do not address image quality.

⁹⁷ Educational videos in VHS, Betamax, and even reel-to-reel have been used for years without issue.

why the work on Blu-ray cannot be played back in the class. They also fail to explain why DVD video quality, which as discussed above can be achieved with video capture software, does not satisfy these purposes. Consequently, even permitting the possible inferences, the explanation falls short of demonstrating any credible nexus between video quality and educational purposes.

While proponents claimed that the prohibition against circumvention resulted in an adverse effect with the production of *Greenwood Is Burning*, the example is vague and conclusionary.

To prepare for the production, students spent weeks viewing clips of documentaries and movies on the period. The educators who helped them in this process required many high-quality clips of media to teach nuances in everything from voice and accent to architecture and costume. Without this exemption, educators wasted time and missed critical details only discernible through high quality media. ⁹⁹

Proponents fail to describe whether high quality media is DVD quality or BD quality. Moreover, proponents fail to identify any works, particularly works distributed on AACS-protected BDs that they were unable to use. Because evaluating whether the prohibition against circumvention actually caused the effect complained of (educators wasting time and missing critical details) is impossible, proponents have failed to demonstrate credibly that the prohibition against circumvention had a substantial adverse effect on the noninfringing use of the work.

⁹⁸ Even assuming that HD quality would be required, which it is not, the proponents still have not shown that the prohibition against circumvention of AACS-protected BDs has a substantial adverse effect on the use of the works. The proponents have not identified any work that they cannot use due to the prohibition. Therefore evaluating whether the prohibition against circumvention actually results in the allegedly substantial adverse effect is impossible.

⁹⁹ Comments of Professor Renee Dobbs at 6–7.

3. Alternative sources will provide sufficiently high quality video

As discussed, above, the website *www.anyclip.com* provides ready access to clips of many movies, which can either be streamed from the site (including a series of clips put into a playback sequence) or captured locally using a tool developed under the free API license available on the site.

Further, although proponents claim that current video capture software is insufficient for their purposes, their citations are to the Register's prior recommendation based on the software available in 2009. As demonstrated above, video capture software has improved greatly in recent years, is simple to use, and provides high quality image and sound. In essence, the market has responded, negating the need for an additional exemption to the prohibition on circumvention. Further, video cameras on smartphones offer a high quality, widely available alternative, in contrast with the high price of camcording that was found in the previous rulemaking.

X. AACS-Specific Exemption Made by Individual Proponents

Proposed Class:

10B

Summary of Argument:

AACS LA opposes the proposed class. The proffers made by these individual are void of any factual predicate, and the opinions do not constitute legal argument. Consequently, the proposed class must be denied.

Facts:

AACS incorporates by reference those facts set forth above in its general statement of facts about developments in the marketplace since the last rulemaking.

Legal Argument:

A. The proponents fail to allege the required elements to establish an exemption in this proceeding

The Copyright Office has grouped five requests filed by individuals under the above proposed class. The requests, filed by Curt Wiederhoeft, on its face does not relate to AACS. As with other requests not specifying AACS technology, AACS LA requests that any exemption based on Mr. Wiederhoeft's request specifically not include AACS technology. AACS LA opposes the other requests, for the following reasons. First, none of the four meets the requirements set forth in the Register's notice for submissions on which an exemption might be justified. As indicated in the introduction to our comments, above, the proponents of an exemption bear the "burden of proof that an exemption is warranted for a particular class of works" and further "the prohibition is presumed to apply to all classes of works unless an adverse impact has been shown."

Second, the requests do not "establish that the prevented activity is, in fact, a noninfringing use under current law." The statements in the requests are summary and assert the "need" as making back-up copies, allowing personal viewing on a format or device of the consumer's choosing, exercising fair use alone, and dealing with obsolete or abandoned formats. Without any evidence that AACS in particular is preventing specifically identified activities that are "fair use" or otherwise noninfringing, none of these requests meets the threshold burden as stated in the Notice. Identifying the technological measure has been a basic requirement of this proceeding to establish whether a noninfringing use has been or will be adversely affected. In

44

¹⁰⁰ See supra Section IV.A.

¹⁰¹ 76 Fed. Reg. at 60,400.

¹⁰² *Id.* at 60,403.

the 2003 Rulemaking the Register stated, "the identification of the particular technological measure to the prohibition applies is necessary to examine whether the use was in fact prevented by the technological measure"¹⁰³

Third, the requests do not meet the burden of "narrowly tailoring" the proposed exemption so that it leaves in place "the statutory prohibition against circumvention . . . for that class with respect to other uses." ¹⁰⁴

XI. Conclusion

For all of the reasons given above, AACS LA requests that the Register recommend, and that the Librarian decide, not to approve any of the requests for exemption from the circumvention prohibition applicable to AACS technology.

¹⁰⁴ 76 Fed. Reg. at 60,403.

45

 $^{^{103}}$ 2003 Rulemaking at 91.